

What's (secretly) KILLING YOUR PC?

Remove the 10 deadliest hidden processes p50



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Advertisement sales & media pack 020 7907 6799 Advertising Director Andrea Mason Deputy Advertising Manager Alexa Dracos

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Subscriptions Manager Sarah Aldridge Senior Direct Marketing Executive Marketing Production Manager Gemma Hills For subscription enquiries ring 0844 815 0054

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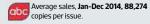
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From the Editor

Every couple of days I get a strange cramp in my left thigh. The doctor has no idea what it is, and I'm not especially worried because it soon goes. But I do wonder if little niggles like that are storing up trouble for the future. The same goes for a shoulder strain which twinges every few hours.

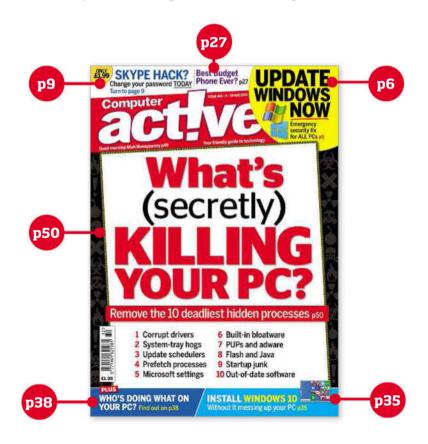
I'm sure you're not interested in my aches and pains (though please email if you have a diagnosis). I mention it only as a way of highlighting that small problems, if ignored, can trigger bigger ones. That's what we're trying to avoid in our Cover Feature. We explain how to remove the 10 hidden PC processes that, bit by bit, are slashing



your speed, power and space.

One thing you may want to remove by now is Windows 10 - you've had almost a week to download it. Or perhaps you're loving it. Either way, please let me know. We'll review it in our next issue, and include some of your opinions.

Daniel Booth editor@computeractive.co.uk



THIS ISSUE IN NUMBERS

49.7%

Proportion of emails in June that were spam lowest for 12 years - p8



£79

Price of the fivestar Canon Pixma MG6650 printer - p26 12

Minimum number of characters passwords should be - p58

HOW TO USE SNIPCA URLS

We use snipcas to turn long URLs that are hard to type into ones that are short and simple. They aren't websites themselves, which means they won't be recognised if you type them into Google. Instead, you need to type them into your browser address bar, then press Enter. Doing this will take you to the correct website.

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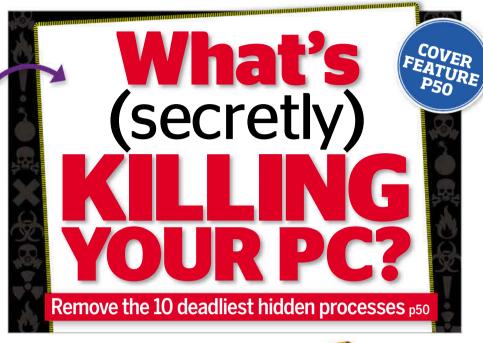
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On sale now at www.snipca.com/14981

at time of going to press

News

The top stories in the world of technology

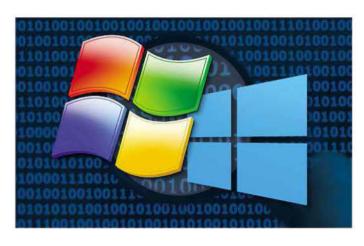
Microsoft issues emergency Windows fix for font flaw

Microsoft has been forced to issue its first emergency patch since November 2014 for a vulnerability in Windows that affected all versions from Vista to 10.

Normally, Microsoft releases security fixes on the second Tuesday of every month. The company's decision to release a fix outside this schedule shows that it regards the flaw as extremely serious.

All Windows users should check that they have Windows Update switched on to make sure they receive the fix follow Microsoft's instructions at www.snipca.com/17422. If it is switched on, you should have received the update automatically.

If the option to update automatically isn't selected,



click it, then restart your computer.

Microsoft acted after a flaw was found in the way Windows handles fonts. Hackers would have been able to exploit it to take remote control of victims' computers after tricking them into opening infected email

attachments or visiting malicious websites.

Once hackers have control, Microsoft said, they'd be able to "install programs; view, change, or delete data; or create new accounts with full user rights".

In its Security Bulletin announcing the fix (MS15-078, www.snipca.com/17421), Microsoft said it had no evidence that the flaw had been used to attack Windows users.

However Microsoft's decision to issue an emergency patch indicates that it thought was an attack was imminent.

XP also at risk

Given that the flaw affects every currently supported version of Windows, it's highly likely that XP is also affected. Users of Windows XP systems will therefore remain vulnerable to the attack.

COMMENT

Emergency fixes are a reminder of the importance of making sure Windows Update is set to work automatically. Watching your PC update is nobody's idea of fun, but having your PC infected by hackers is much worse. Fortunately this flaw has been fixed before hackers could exploit it, and for that we have to thank the dedication of security experts who aren't on Microsoft's payroll. Google especially should be commended for the work of its Project Zero team, which has found its second major Microsoft flaw since it launched 12 months ago.

Researchers at security companies FireEye and Trend Micro detected the flaw after scouring files from Italian software firm Hacking Team, which were leaked online in July (see News, Issue 454).

It was also spotted by experts from Google's Project Zero, which is a team of security analysts that look for zero-day exploits. These are flaws that are unknown to the software developer responsible for the vulnerable program - in this case, Microsoft.

 Is Microsoft hushing up a Skype hack? See 'Question of the Fortnight' page 9

Microsoft makes XP even less safe to use

Microsoft has withdrawn the Malicious Software Removal Tool from Windows XP, leaving the operating system at further risk of attack. The tool - downloadable for Windows Vista, 7, 8 and 10 at www. snipca.com/17427 - helps users search for and remove common



malware. Microsoft has also stopped updating Microsoft Security Essentials in XP. The company had continued to offer both these tools following the end of XP support in April 2014. It hopes the decision will prompt people to upgrade their PC to Windows 10, which costs £99.99 for XP users.

You'll like this... Savers will now receive a text message when their interest rate changes (www.snipca.com/17406)

...but not this One in five young motorists take selfie photos when driving (www.snipca.com/17407)

EU rules may scrap Cameron's porn-blocking plans

David Cameron's plans to block pornography sites may be scuppered by new EU laws.

The Prime Minister announced porn filters in 2013, forcing people to "opt in" if they want to watch sexually explicit content.

He said that the easy accessibility of "poisonous" porn websites was "corroding childhood". Most UK ISPs now block porn by default, as well as sites on self-harm, suicide and anorexia.

But the EU's new Single Telecom Market law says that internet traffic throughout the EU should be treated equally, a principle known as net neutrality. This would make it illegal for governments to block access to websites.

In response the Government said it was "exploring



options", which could mean pushing porn-blocking legislation through the House of Commons that all UK ISPs would have to abide by.

The Government's advisor on internet security John Carr told the Sunday Times: "The risk is that a major plank of the UK's approach to online child protection will be destroyed at a stroke".

"It all seems a bit sneaky or tacky for this to have come about as the result of a measure which, ostensibly,

has nothing whatsoever to do with online child safety," he

The Prime Minister will be keen not to let the EU derail proposals he has defended passionately. Two years ago, Cameron said that "in the

> darkest corners of the internet. there are things going on that are a

direct danger to our children". He said he was acting

because he felt "profoundly as a politician, and as a father, that the time for action has come".

The Single Telecom Market bill, which is due to be voted on by the European Parliament in the autumn, will also prevent mobilephone networks from charging customers roaming fees throughout the EU (see News, Issue 454).

IN BRIEF

SAVE OFFICE FILES IN GOOGLE DRIVE

A new plug-in from Google lets Microsoft Office users save their files in Google Drive. It means you can open Excel, Word and PowerPoint in Drive, though there are limitations. For example, files must be saved in the .doc or .docx format. To automatically download the plug-in visit www.snipca. com/17387. Find out more at www.snipca.com/17388.

WATCH OLD NEWSREELS ON YOUTUBE

Winston Churchill, Charlie Chaplin and Albert Einstein are among the leading figures to feature in two new collections of historic newsreel footage available on YouTube. When completed, the video archives from British Movietone (www.youtube. com/c/britishmovietone) and Associated Press Archive (www.youtube.com/c/ aparchive) will contain 550,000 clips, dating back to 1896. You can watch events such as the Titanic leaving Belfast for Southampton, and London's VE Day celebrations.

Ripping CDs is now illegal again, says UK High Court

The UK High Court has declared it illegal to rip CDs and DVDs just nine months after Government legislation made it legal (providing it was for personal use only).

It means you can't copy a CD you've bought in order to have a backup or to play its tracks on more than one device, for example. Copying Blu-rays, MP3s and ebooks has also been made illegal again.

The decision followed a legal challenge from Basca, the Musicians' Union, and lobbying group UK Music. The High Court said that the Government was wrong not to introduce a compensation scheme for songwriters,



musicians and other rights holders who face losses as a result of their copyright being infringed. Campaigners against the law claimed that it would cost musicians £58m in lost earnings.

Jo Dipple, CEO of UK Music, welcomed the ruling. She told the BBC: "The High Court agreed with us that the Government acted unlawfully when it introduced an exception to copyright for

private copying without fair compensation".

She added: "It is vitally important that fairness for songwriters, composers and performers is written into the law. My members' music defines this country. It's only right that government gives us the standard of legislation our music deserves".

However, it's unlikely the ruling will deter people from ripping CDs, partly because it's unclear how the law could be enforced. For years, millions of people have ripped CDs without any action being taken against them. Legal experts say that the High Court's ruling may turn out to be nothing more than symbolic.

Tomorrow's

In 10 years we may be using computers that run at the speed of light. That's the prediction from the University of Surrey's Dr Richard Curry, who is developing a type of glass that can be built into computers to transfer information using light. He says that the speed increase would be equivalent to the difference between email and posting a letter. Read more about his work at www.snipca.com/17397.

News

IN BRIEF

COMMODORE REBORN AS A PHONE

The Commodore brand has been revived in a smartphone containing emulators for the Commodore 64 and Amiga PCs, allowing users to play classic games on it. It's called the Commodore PET, named after the influential range of computers launched in 1977. UK release date and price have yet to be confirmed. For more information visit www. commodoresmart.com.

APPLE PAY LAUNCHES IN THE UK

Apple Pay (www.apple.com/ uk/apple-pay) has launched in the UK, letting customers buy items for under £20 in shops and restaurants by touching their iPhone against a card reader. You'll need an iPhone 6 and a bank account with The Royal Bank of Scotland, NatWest or Ulster Bank. Apple says HSBC and Lloyds will be added "soon". Barclays has its own contactless payment system, called bPay (www. bpay.co.uk).

Hackers can lock your iPad but there's a simple fix

Scammers are trying to steal money from iPhone and iPad users by tricking them into paying £50 to fix their device.

Victims see a hoax "crash report" pop-up message (see screenshot) as they browse the web using Safari. This freezes the device's screen. preventing the user from continuing to browse.

The message claims that a "third-party application" has caused iOS to crash, and urges you to ring a US number for an "immediate fix".



When you ring the number, you speak to people posing as Apple's technical support team. They ask for your

device's serial number and your credit-card details, and charge up to £50 for the 'fix'.

Fortunately, it's easy to unlock the screen - simply follow the steps in the box below.

The scam has been widely reported in the US. where it was first seen last November. Its appearance in the UK suggests it has been a success across the Atlantic.

If you think you've been targeted by the scam contact Action Fraud at www.snipca. com/17385.

HOW TO UNLOCK YOUR DEVICE

1 Turn on Airplane Mode by swiping up from the bottom of the screen and tapping the plane logo, or by tapping Settings and turning the Airplane Mode slider to 'On' (see screenshot).

2 Delete your Safari data by

tapping Settings, Safari, 'Clear History and Website Data'.

3 Close Safari, exit Airplane Mode and restart your device. Visit Apple's Support pages for ways to improve your security: www.snipca.com/17386.



Good news: spam is falling. Bad news: malware is rising

Levels of email spam are at a 12-year low, according to security firm Symantec.

In its latest monthly Intelligence Report the company said that 49.7 per cent of emails it scanned during June were junk – the first time the total has dipped below the halfway mark since 2003.

The drop appears not to be a blip. On 14 July, spam levels had fallen to 46.4 per cent.

Phishing emails have also fallen, from one in 1,865 emails in May to one in 2.448 in June.

However Symantec - which makes the antivirus software Norton - said that the amount of malware has risen sharply. In June, Symantec caught about 57.6 million individual pieces of malware,



almost double the amount it recorded in April. These threats included 477,000 incidents of ransomware.

Symantec said that the simultaneous

fall in spam and rise in malware suggested that criminals are changing how they target potential victims. It seems that as spam filters get better, and people become wiser to scams, hackers think they will have more success infecting PCs with malware.

The company attributed the fall in spam to police crackdowns on criminal botnets, which spread millions of emails. Police in the UK have helped to dismantle seven botnets, while many European internet service providers have shared information about botnets

in order to make them less effective.

You can read Symantec's latest Intelligence Monthly report on its website at www.snipca.com/17341.

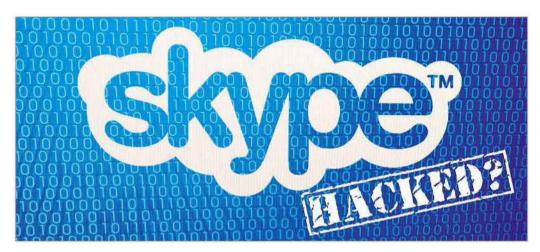


Is Microsoft hushing up a Skype hack?

Microsoft has advised all Skype users to change their passwords, but it hasn't revealed what's gone wrong

comething very strange is **J**going on with Skype. For the past month users have been complaining that they've been plagued by spam messages urging them to click a link that's been shrunk using Google's **URL-shortening** service (https://goo.gl).

Other users say their account has been hijacked and used to send the spam to their contacts. Because the link in the message is a shortened URL, it's impossible to know before you click it what site you'll be directed to, but Skype users say it takes you to a Russian website that infects vour PC.



may have happened, beyond Claudius adding that the spam could be a result of malicious software vet to be detected by antivirus software. Microsoft's

So what's happened? One possibility is that hackers have infected the computers of the people 'sending' the messages. This seems unlikely because many victims say the messages were sent when their PC, phone or tablet

Another theory suggested by victims on the forum is that Skype's servers have been hacked. Others suspect that there's a security flaw in the web version of Skype.

was switched off.

Alternatively, criminals may have got their hands on thousands of Skype passwords through a mass phishing attack, or by targeting people who use the same passwords for other sites and accounts.

Whatever the truth, Microsoft has already upset countless users. What seems to be annoying them more than the spam messages is the lack of information. Referring to the lengthy forum thread, one user (Lozza6) wrote: "27 pages and still nothing? Well, clearly this is all our fault. Remember the customer is always wrong. Never admit

THE FACTS

- Many Skype users have received spoof messages asking them to click a link to a Russian website
- Some users say that messages were sent from their account when their computer was switched off
- Microsoft has told all users to change their password

your faults, and deny, deny deny! Well done Skype/ Microsoft. Very professionally handled!"

Until Microsoft says more, it would be wise to follow their only advice so far: change your password. It's a chore, but it's worth doing to prevent hackers from spamming your contacts (see page 58 for tips on creating powerful passwords). Worryingly though, some users have said that spam continued to be sent from their account after they changed their password. If this is true, then Microsoft should stop ignoring users and fix the problem as a priority.

f Skype users are complaining that their account has been hijacked to send spam messages ""

At the time of writing, the complaints have filled 27 pages on the Skype Community forums (www.snipca.com/ 17408). The first person to post said he was sceptical about the message because it came from a friend he rarely speaks to on Skype. One Skype Community Manager (called Claudius) responded by saying that the company's engineers were "looking into" the situation. He advised all users to change their password by following the instructions at www.snipca.com/17409.

That was in early July. Since then, Microsoft - which owns Skype – hasn't provided any more information about what

apparent reluctance to reveal more has frustrated many Skype users, leading some to suspect the company of hushing up a hack.

One Skype user called Jaskypecom said that hackers used his account to send spam to "hundreds of business contacts", adding that he's considering switching from Skype. Another user, called Heeman, said hackers had sent messages through his account even though he hasn't signed into Skype this year. Many insist their account history shows several failed login attempts, which would suggest hackers are trying to guess their password.

Letters

Tell us what's on your mind

Email: letters@computeractive.co.uk Facebook: www.facebook.com/computeractive



If Windows ain't broke, don't fix it

When I was a young boy my grandfather's favourite saying was, 'If it ain't broke, don't fix it'. It made a great impression on me. He died in the 1970s, so he never said it in reference to computers, but if he was alive today it's a sentiment he'd have applied to Windows. He would have stuck with XP until it did finally break, and then switched to Windows 7. That's what I did last year. In my opinion Windows 7 is nowhere near broken, so it doesn't need fixing. In other words, I won't be upgrading to Windows 10.

Gavin Cooke

In all the hullabaloo about Windows 10, one thing had escaped my attention, until Computeractive mentioned it in your 'Should you upgrade?' cover feature (Issue 454). I am referring to Microsoft's removal of Windows Media Center (WMC). I know WMC isn't the greatest software in the world, but it's one that I feel familiar with. I'm sure people who are bigger PC experts than me would advise I use a different program, but it does everything I need on my Windows 7 PC.

At my age (born the same month as the Queen!), can I really be motivated to learn more new software? I think I'll stick with what I've got.

David Smith

I shall be upgrading to Windows 10 within a week of it being released for one simple reason: if I carry on using Windows 8 for just one more day than I absolutely need to I shall lose the will to live.

Simon Peel

Joseph Hamilton may well 'dance a jig of delight' when he downloads Windows 10 (Letters, Issue 454), but I predict that dance will involve frustrated forehead-slapping within days. Unlike Joseph, I shall wait a few months before upgrading to wait for the early bugs to be removed, at which point I'll write in to confirm whether Windows 10 is worth a boogie or not.

Bryan Worthington



Why we've stopped shopping at Amazon

Amazon used to be my first port of call when shopping online. Not any more. First came the indefensible increase in the minimum spend to qualify for a free delivery. Then I found that Amazon's policy concerning reviews forbade me from mentioning the seller of a product or anything concerning its delivery. This meant I couldn't tell the whole story to other prospective buyers.

The final straw came when I bought a Fire TV box, mainly to watch YouTube and BBC iPlayer on my TV. Amazon's advertising clearly states: "Voice search that actually works - simply say the title of what you want to watch and start enjoying in seconds".

But what they don't say is that this only works with Amazon services. In other words, it cannot be used to search YouTube or BBC iPlayer, both of which still require tedious, time-consuming clicks on individual letters. With Fire TV remotes costing £25 to replace, this is simply not on. I'm sure Amazon's lawyers would explain that its claims for voice search are not misleading, but I still feel conned. As a result, I will be thinking twice before trusting Amazon in future.

Nicholas Kersov

I've been reading the letters lambasting Amazon's £20 minimum order for free delivery and I couldn't agree more. I thought I'd share an experience, and a revelation.

I had a problem with an electric guitar which I bought from Amazon. After it developed a fault, Amazon supplied a refurbished one as new, but it was in a terrible condition. The customer-service debacle that followed ruined a perfectly good Saturday. I vowed I would not buy any more musical instruments from Amazon because I'd found a great independent music store nearby in the meantime.

I have also now found an excellent computer store, a great bookshop and started going back to HMV to buy DVDs and CDs. Although they are slightly more expensive, when you take into account the postage you have to pay online they are highly competitive. Amazon no longer has a monopoly on good prices. Bricksand-mortar retailers have caught up and realised the way to survive is to sell in volume at a lower margin.

Now, when I look on Amazon's website, if there's something I need to buy I'll find a way to do so locally. I don't need to wait indoors for delivery. It's all liberating, and makes me feel good about not supporting a corporate leviathan that has forgotten its roots - if it ever had any.

My dad had a business supplying a large whisky distributor. He always

Texting 999? People will abuse it when drunk

It's a terrible idea to let people text 999 (News, Issue 454), and I'll tell you why, with some help from my 18-year-old grandson. Like most youngsters he texts all the time. Last weekend, he was telling me about texting while drunk, and how he often regrets it the next morning (I don't judge - I was no angel in my youth!). I asked him why he doesn't ring people when drunk, and he said that it would feel too intrusive. Texting, he says, is easy, fun and doesn't disturb the other person (if they're asleep, for example).

999

My fear, therefore, is that if we let people text 999, they are likely to do so as a joke when drunk. Phoning 999 feels more serious, which is why prank calls, while annoying, are relatively rare. But sending a hoax 999 text feels like something many people, after a few too many beers, will try to get away with. And that's nothing to LOL about.

Larry Sinclair

taught me that demand comes in arcs and I can't help thinking Amazon is pushing itself towards that downward arc faster and faster. Glad I'm not a shareholder. Stuart Mitchell

Three cheers for Chillblast

Every fortnight Consumeractive is devoted to the problems we all experience dealing with the murkier side of the computer world. Many of the problems in this section reflect the difficulties and disappointments we all experience. It is therefore a pleasant change that I can write a paean of praise.

I bought a Chillblast Fusion PC 18 months ago. It is a great machine (Computeractive recommends it), but a fault developed in the memory and the on/off button stopped working. I contacted Chillblast and the computer was collected the next working day, the faults found and rectified, and my PC was back home very soon after - all under warranty, without a word of fuss. I do my share of complaining to you and the rest of the world, so the least I can do is to report and applaud some excellent service from Chillblast. The only contact I have with the firm is as a satisfied customer

Dan Jones

Licence fee loss: BBC 'only has itself to blame'

After reading Issue 454's 'Question of the Fortnight' about the BBC charging people the licence fee to watch their iPlayer, I decided that the Beeb has only got itself to blame for falling revenues. The BBC made a terrible error when it made the iPlayer available to everyone without first closing the loophole that let people watch it for free.

It's shocking that nobody at the BBC had the foresight to realise this would mean thousands of people not watching live TV, and therefore thousands of people not paying the licence fee. But it's even more shocking - arrogant, even - if they did realise this, but carried on regardless.

This kind of mistake is inevitable in a publically funded organisation. Can you imagine a private company launching a product that's projected to cost them £150m in lost revenue? It's clearly a case of the creative side of the BBC having too much influence over the money side. A disaster like this just proves that the BBC needs to be more accountable.

I'm not knocking the iPlayer itself. It's

STAR LETTER

Should I upgrade to Windows 10? How I made up my mind

Over the past few months in Computeractive I've read lots of opinions on Windows 10, but they've all seemed to contain a hidden agenda.

It's been hard to get an impartial view. That's why I was so thankful to read vour 'Should vou upgrade?' guide (Issue 454). It answered a lot of my questions, and helped me make up my mind. I thought I would share my decisionmaking process.

I use Windows 7 on a PC, and Windows 8 on a laptop. I love the former, and have a love-hate

relationship with the latter. However, I am increasingly using my laptop over my PC, but that means using an operating system that makes me want to tear out what little hair I have left.

An obvious solution would be to upgrade my laptop to Windows 10. But as you rightly pointed out in your feature, anyone who has spent ages customising their Windows 8 Start screen (as I have) won't want to lose all that hard work. And odd though it sounds, it's precisely because I've

struggled so much with Windows 8 that I now feel inclined to stick with it. I'm a stubborn type.

But as you can tell, I'm also indecisive,

so it's not an easy choice. However, ultimately something has to give - and that something is Windows 8. But not just yet. Before I give it up I'm determined to master it (it will help to develop my computing skills). That should take a few months, by which time the first Windows 10 update should be ready, fixing all the early problems. And if I hate

Windows 10, I've still got my Windows 7 PC. What could possibly go wrong? Actually, don't answer that!

Michael Brownlow

CA says Our 'Windows 10: Should you upgrade?' feature prompted the biggest response from readers so far this year. It seems that many readers plan to upgrade soon, but will first wait for any problems to be fixed. See the opposite page for more reactions.



The Star Letter writer wins a Computeractive muq!

brilliant, and I use it all the time (though I still pay my TV licence fee). But the BBC should have been more disciplined about whether it was the right thing to do. Recent events cast doubt on that.

Murray Gay

Flying the Ferranti Pegasus

🗾 Like Ralph Torretta (Letters, Issue 🋂 453), I graduated in the early 1960s, and was fortunate to join a company that had one of the first computers, a Ferranti Pegasus (pictured right). It was one of the first personal computers because you had to write your own program in Pegasus Autocode, punch the program with the input, take it upstairs to the computer, feed it in, wait

for the results then take them downstairs to print.

With the help of Computeractive I've kept in touch with the advances in technology, but I'm still treating it as a tool rather than a lifestyle.

Michael Morris



Consumeractive

Why is Amazon accusing me of returning too many items?

I've been buying items on Amazon since 2004. But Amazon emailed me to say it was concerned about how many items I've returned and refunds I've claimed. All the items I returned were faulty, or not as described, or simply not as I expected them to be. Could you shed some light on this?

Hugh Miller

We're a bit stumped by Jeremy's case because he's entitled to return goods that he's not happy with under the Sale of Goods Act or the Consumer Contracts Regulations. And there's no legal limit on the number of items vou return.

We think Amazon may be concerned that Jeremy isn't getting the right service from sellers. But it didn't convey this properly in its email, and it hasn't responded to any of Jeremy's replies, leaving him angry and anxious.

We've passed this on to Amazon and hopefully it will contact Jeremy directly. It may refuse to discuss Jeremy's account with us because of Data Protection rules, but we hope to explain its reasoning

CASE ONGOING I want to cancel my Tunisian holiday. Can I get my money back?

I've paid Thomas Cook for a package holiday to Tunisia at the end of August, but following the terrorist attack in June, I would like to cancel. The package I bought is ATOL-protected, so can I get my money back?

Margery Claire

Yes, Margery may be able to get her money back, and her desire to cancel her holiday is understandable following the horrific shootings in the Tunisian resort of Sousse. But we say "may" because the situation in Tunisia very fluid at the moment.

When we went to press the latest alert from the Foreign Office advised against all non-essential travel to the country. Typically, when these nonessential travel alerts are issued travel operators and agents will give customers a full refund, even though it's not a legal requirement. The Association of British Travel Agents (ABTA) said "people with package holidays to Tunisia will be entitled to a refund or alternative holiday".

However, Margery wasn't due to travel until the end of August, so the situation may change again. If the non-essential travel alert is withdrawn, Thomas Cook - as a goodwill gesture - may let her change her destination and choose an equivalent holiday as a replacement. Many tour operators are currently doing this for people booked on Tunisian holidays. But this is also not a legal requirement and each company will have its own policy so you must check with yours.

Thomas

Margery can't rely on her ATOL (Air Travel Organiser's Licensing) protection. It's a bit of a red herring in situations such as this. While it's certainly a good protection scheme run by the Civil Aviation Authority, it's only relevant if a travel operator goes bust. She should contact Thomas Cook immediately to see what it can offer her, and continue to check ABTA's website (http://abta.com) and follow Government advice:

www.gov.uk/foreigntravel-advice.



My wife and I were accused by the manager of a shop in Barrow of "wilfully damaging" a solarpowered tree lantern, which we bought for £89.99, then returned because it was faulty. The manager alleged we pulled out the wires to the solar battery. We complained to the firm, which now says we "accidentally damaged" it. We didn't, but the manager may have done when examining it. Can you help?

Philip & Sue White

Putting the inappropriate behaviour of the shop manager to one side, this is a simple case of having to prove whether an item was inherently faulty. The Whites will need to get the lantern independently tested to prove it was broken when they bought it. It may be hard to demonstrate a subtle inherent fault now that there's a more obvious one (the wires having been pulled out).

Proving that the shop manager embarrassed the Whites may also be tricky, because it's a classic case of 'he said, she said', with each party disputing the other's account. We've asked the store's headquarters to investigate the Whites' complaint. If the manager did behave in the way described, we would certainly regard it as unacceptable, and possibly slanderous - so at CASE the very least they could be owed an apology.

in a later issue.



Contact us so we can investigate your case

Email: consumeractive@computeractive.co.uk Write: Consumeractive, Computeractive, 30 Cleveland Street, London W1T 4JD Please include both your phone number and address. Unfortunately, we can't reply to all your letters.

We stand up for your legal rights

Do retailers have a time limit for PC repairs?

You've often told your readers in this section that retailers are allowed to carry out a repair on items before offering another solution. such as a replacement. But in my experience (especially with computers), companies can take weeks to get items back to you. Can you tell me if there's a time limit, and what can we do if a company takes too long?

Bill Jones

Yes there's a time limit and it's set out under the Sale of Goods Act (SOGA). The only problem is that the law uses that catch-all phrase that we're all familiar with: repairs must be carried out "within a reasonable time". So what is a reasonable time? Most lawyers say it's about 30 days.

The only time a retailer may be able to argue for a longer time is if it's unable to find parts it needs to perform a replacement. SOGA also adds that repairs mustn't "seriously inconvenience" the customer. For most of us, being without a working PC is a

serious inconvenience, even if it's only for a couple of days, let alone longer than 30.

If a company is dragging its feet, the best thing to do is contact them after they've had it a couple of weeks to check on progress. You can also email us - we'll



contact the company on your behalf. If there's still no sign of a repair after a couple of months, you should threaten the company with legal action through the small claims court.

CASE UPDATES



Apple replaces broken iPhone for a second time

In this update we'll explain your rights if vour initial complaint has been successfully resolved but another problem arises. In October 2014, reader Gareth Bates

contacted us about the problems his wife had been having with her iPhone 5 (see Issue 433). Armed with our advice, he persuaded Apple to eventually replace his wife's phone. But only eight months later this new phone conked out completely, so Gareth contacted us again asking if the Sale of Goods Act (SOGA) still applied. The answer is yes, it does still apply, despite retailers often being reluctant to help customers a second time, having already replaced a device. Any replacement you're given, whether it's a new or refurbished device, has to be "fit for purpose". We'd arque

that if the replacement is a new device you should be entitled to a further six years of protection. You can knock some years off that if it's a refurbished device. For example, if you owned the original device for two years, the refurbished device should be expected to last another four.

Whatever the condition of the replaced item, after six months the onus is on vou to prove that a fault is inherent, and not just wear and tear or accidental damage. Happily for Gareth, Apple has again replaced the phone with a new model.



THIS WILL COME IN USEFUL

Washing machine manufacturers' contact details

Beko 0345 600 4911

Contact form: www.beko. co.uk/contact-us Twitter: @BekoUK

Bosch 0344 892 8979

Twitter: @BoschUK

Hotpoint 0843 636 2617

Twitter: @Hotpointsupport

Indesit 08000 921 922

Contact form: www.snipca.com/17282 Twitter: @IndesitUK



0344 847 5454

www.snipca.com/17285 Twitter: @LGUK

Russell Hobbs 0345 658 9700

Contact form:

www.snipca.com/17273 Twitter: @RussellHobbsUK



Samsung 0330 726 7864

Contact details:

www.snipca.com/17284 Twitter: @SamsungUK

Zanussi 03445 612 612

Twitter: @Zanussi_UK



Protect Your Tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

Fake bank emails with attachments

What happened?

Customers of Barclays, Royal Bank of Scotland, HSBC, Lloyds Bank and Santander are being targeted by hackers trying to steal their banking details, according to researchers at security company Bitdefender.

Thousands of people received a phishing email claiming to come from a tax accountant or consultant. The criminals behind it are currently using three different types of message in the scam to test which is most effective.

One email purports to be a follow-up message from a tax consultant. It asks users to download an attached archive, then provide information to complete a financial transaction. Another email contains financial documents and asks the recipient to verify them.



A third email comes with the subject line "Alert regarding penalties imposed" (see screenshot). Attached is a zipped document which, the email says, contains information about "money penalties imposed on your firm".

In each case, downloading the attached file downloads the deadly Dyre banking trojan to your PC. First detected in 2014, Dyre hides on a victim's PC, springing into life when the user enters personal information on a specific site - such as the password for online banking. Criminals can steal your

details without you ever knowing. People who bank online in the US. Australia, France and Germany have also been targeted.

Researchers found that Dyre was targeting Microsoft Outlook users in January 2015 to send infected emails from a user's account.

What should you do?

This is one of the most sophisticated banking-related phishing scams we've seen in 2015, but it still relies on the user downloading an attachment. So you should be safe as long as you don't click any suspicious files emailed to you.

Because Dyre hackers can steal your money without you knowing, you should also check your bank statements regularly, and report any transactions that seem amiss to your bank.

New tools

McAfee Auto Opt-out

www.snipca.com/17294

Hands up who hates pre-ticked boxes when downloading software? That looks like all of you! We share your pain, as does Stuart Andrews (see The Final Straw, Issue 450), so we welcome any assistance that helps us avoid all those unwanted extras.

One of the most infamous examples is the McAfee Security Scan Plus, which arrives courtesy of one of those accursed pre-ticked boxes - when you install and/or update Adobe Flash (get.adobe. com/flashplayer). This is especially irksome because Flash's numerous security flaws - and hackers' eagerness to exploit them - mean it needs constant updates. That's a lot of boxes



you have to remember to untick.

Riding to the rescue is this Firefox add-on, which removes the tick from the McAfee box (see screenshot). Click the link above to go to Mozilla's Add-ons page for its browser, then click the 'Add to Firefox' button. In the box that appears click the 'Install Now' button.



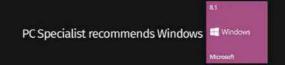
Scammer said my Mac had '100 faults'

A caller claiming to be from a firm working with Microsoft said I'd added four email accounts to my Windows account that would apparently be used to spread spam emails and malware in my name. When I told him I don't use a Windows PC, his supervisor intervened and, assuming I used a Mac, claimed OS X Mavericks has more than 100 faults and that I should connect with TeamViewer (www.teamviewer.com) so he could 'fix' my PC. TeamViewer is legitimate software for sharing access to PCs, but is used by scammers to steal bank details. I hung up immediately.

Barry Gregson-Allcott

Warn your fellow readers about scams at letters@computeractive.co.uk









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SYSTEM TOOL

Virtuoz

www.snipca.com/17436

What you need: Windows XP, 7, Vista, 8.1 or 10

At last, Windows 10 makes its debut in our 'What you need' list... for a program you wouldn't need on Windows 10 anyway. Virtuoz is a virtual-desktop tool - and Windows 10 has virtual desktops built in.

But we haven't all got Windows 10 yet (or want it) - and we certainly don't all want to chuck out our spare laptops with Windows XP, 7 or 8 installed. So Virtuoz, made by the same team as the brilliant PUP-blocking tool Unchecky (see page 55), is very handy for making life easier on older, smaller

Virtual desktops are not the same as virtual PCs. Virtual PCs let you run multiple operating systems on one computer, using much more complicated programs like VirtualBox (www.snipca.com/17426). Virtual Desktops are simply different Desktop layouts that you switch between with one



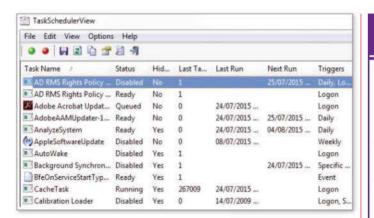
click, like TV channels. So you can move swiftly between programs, browser windows and documents on one screen.

Virtuoz, which is tiny (half a MB) and portable, is similar to Sysinternal desktops (www.snipca.com/17425), which supports four virtual Desktops. Virtuoz also offers four by default, but you can create up to 20 by editing its INI file. Other than that, there's no complicated configuration involved. Just select one of the four default desktops from the Virtuoz dropdown menu, then open the window or windows you want to assign to that desktop (say, 'Desktop 4'), and that's that. See below for examples.

To download the program, click 'Virtuoz.zip', save the file and extract its contents. You can then access and control it any time from your system tray. Because the program file is portable, you can run it safely on XP from a USB stick.



- In Virtuoz's window, click 'Desktop 1: Alt+1' to open the dropdown menu, where you'll find three more virtual desktop options.
- 2 Select a virtual Desktop from the dropdown menu (for example, Desktop 1) and open a program (say, File Explorer). That program is now assigned to Desktop 1.
- Select another virtual Desktop from the dropdown (for example, Desktop 2) and open a program (say, VLC). Now, if you go to Desktop 2, you'll only see VLC.
- 4 Alternatively, open the Virtuoz window then manage Desktops from the systemtray icon. The dropdown menu lets you reassign virtual Desktops easily at any time.



SYSTEM TOOL

TaskSchedulerView

www.snipca.com/17417

What you need: Windows Vista, 7, 8.1 or 10

If you like Windows' built-in tool Task Scheduler, you'll love this new portable program from our favourite independent developer, NirSoft. If you don't like Task Scheduler, then this may be the tool that changes your mind.

Task Scheduler's main flaw is that it's not very good at letting you check and edit all the tasks you've set up, and here's where the tiny but powerful tool TaskSchedulerView comes in. It instantly displays a list of all scheduled tasks and lets you enable/disable multiple tasks instantly, tweak their details and schedules, and check how many times they've run.



PHOTO MANAGEMENT

Grids

http://thegridsapp.com

What you need: Windows XP, Vista, 7, 8.1 or 10

Instagram users will love this new tool, which frees your photos from your phone and tablet so you can edit, organise and make creations from them on your PC. You can turn them into gorgeous grid-based collages, share them, post them publicly or to followers, tag them and do all the other things you're supposed to do with photos these days. It's not as versatile as Google Photos (see Secret Tips, page 48) and won't have its wide appeal, but it's free, fun and easy to use.

WHAT SHOULD I DOWNLOAD?

We tell you what software to use

What program will organise my messy photo files?

Over the years I've amassed hundreds of digital photos, and they're spread all over my computer in different folders. Can you recommend a program that scans my PC for photo files and moves them all into one place, so I can access and organise them more easily? Stephen Eric Biggs

Installable photo-organising software tends to be expensive or a bit dodgy. Free program PhotoFinder (www.snipca.com/17420) claims to search your PC

for photos and display them all as thumbnails so you can organise them. But installation is worryingly slow, and it insists on installing Java too - which we're not fans of (see page 56).

At the opposite extreme you've got Adobe Lightroom (www.snipca.com/17434),



which costs £104 and is amazing. If you're an enthusiastic amateur photographer, it's worth every penny (see our five-star review in Issue 453). You can quickly import every photo (and video) from your computer, external drives and even storage cards, consolidate them into libraries with sub-folders, automatically rename them and add keywords for easy searching. Lightroom also lets you edit photos without degrading the original, then export them using an intelligent sorting system. Here, you get what you pay for.

If you're happy to go with an online tool, use the new web-based version of Google Photos (https://photos.google. com; see screenshot), the successor to Picasa. Its autosorting features need ironing out but it's a fun, easy, creative way to organise your shots and store them all for free (see Secret Tips on page 48).



Do you need our advice on what software to use? Just email us at letters@computeractive.co.uk

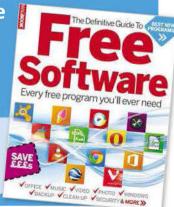
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Reviews

New products tested by our experts

PC | £599 from www.snipca.com/17348

Mesh Elite Pro

A do-everything desktop PC for under £600

£600 is a reasonable amount to spend on a desktop PC. You don't want to skimp, but you don't need Deep Thought either. Software and web pages should load quickly; Office software shouldn't keep you waiting; photo editing should be smooth; and a little video editing should present no problems. You might even be tempted by the occasional game. Well, this is that kind of PC. It doesn't need to bowl you over; it just needs to do its job.

It looks like a computer from science fiction, but it's fast, easy to upgrade and gets the job done

Actually, Mesh has decided it might as well bowl you over anyway. With its chunky finned grille, giant side window (pictured below) and a devilishly red-lit interior, this isn't your standard understated home computer. You might even think it's a bit much, but then you'll catch yourself admiring it when you're working late. Why shouldn't a real-life PC look like the computers in science fiction?

Peer inside and you'll see some good-quality components. The quad-core



Intel Core i5 processor runs at
3.5 GHz – that's three-and-a-half
billion clock cycles per second – that
not only sounds impressive but
makes it one of the quicker
mid-range processors, and it shows.
Paired with a 120GB Kingston SSD
and 8GB of fast memory, it makes
Windows 8.1 feel as responsive as you
could wish for, and with a free upgrade to
Windows 10, you'll be able to keep your
options open.

When it comes to more intense tasks, the Elite Pro continues to shine, running fancy photo filters and converting videos in next to no time. As long as you keep things tidy and don't install a lot of programs you don't need, this is a system that'll serve you well for years to come. Not that you can't fill it up with plenty of stuff you *do* need. Besides the SSD, which is really just for Windows and your programs, there's a 1TB hard drive, which is ideal for larger files like photos and videos as well as your music collection and documents.

Even when working flat out, the Elite doesn't generate much noise; unless it's positioned right next to your ear, you'll just hear a quiet whooshing sound.

Running 3D games will fire up the fan on the graphics card, an Nvidia GeForce GTX 750Ti, which comes with its own 2GB of memory. It can't match the performance of the GTX 960 in the PC Specialist Trion 960 system (see our review, Issue 454), but it'll handle most of the latest games on medium settings, and less demanding ones with all their bells and whistles.

There's room for upgrades, too. Three free RAM slots let you add memory up to 32GB – a DIY job anyone can manage. There are also three unused SATA connectors on the motherboard, so you

SPECIFICATIONS

3.5GHz Intel quad-core i5 4690 • 8GB memory • 120GB SSD • 1TB hard drive • Nvidia GeForce GTX 750Ti graphics card with 2GB video memory • Windows 8.1 • 200x428x447mm (WxDxH) • Two-year warranty www.snipca.com/17348

can install as much storage as you want, if plugging storage into one of the three USB 3.0 ports creates too much of a mess.

One of the 3.0 ports is on the front with one USB 2.0 port, while the other two are at the back with four more USB 2.0 ports – so you probably won't need to use a hub. There are DVI, HDMI and DisplayPort connectors for monitors, and you can plug screens into all of them at once if you like; the graphics card supports up to four. There's also Gigabit Ethernet, but as on many big desktop PCs, Wi-Fi is an optional extra.

Competition is fierce at this price. The PC Specialist Trion 690, for example, is only £50 more, with a slightly faster processor and a much better graphics card. But if those things are not your priority (and you have a secret yearning for red LEDs), the Mesh Elite Pro is a fine choice.

VERDICT: A powerful system wrapped in a case to die for, ready for all your tasks today and for the next few years



ALTERNATIVE: PC
Specialist Trion 960
£650 An overclocked
processor and powerful
graphics card make this
a good bet if you need
maximum oomph



MINI PC | £300 from www.snipca.com/17330

MSI Cubi 008X

A tiny PC that's almost ready to use

Built around Intel's latest 'Broadwell' processors, this stylishly simple mini PC (in black or white) is smaller than most external hard drives. In fact, it's not even big enough to accommodate a hard drive: it has a 128GB SSD instead. If you need more

Cubi comes with a height extension that houses a laptop-type 2.5in hard drive. It's a sensible best-of-both-worlds idea.

storage, however, the

The Cubi range starts at just £100 with a Celeron processor (you'll need to add your own RAM and storage to that). A Pentium chip version comes next at £240 (with the SSD and a just-about- usable 2GB of RAM). Then there's the i3 model, which we tested. It handled everyday programs like a mid-range laptop. Unlike the lower-end models, it can cope with 4K video (four times the resolution of 1080p Full HD). The SSD feels pacey, and the 4GB of memory is adequate. You could upgrade to 8GB later for about £40.

66 A stylishly simple PC that offers great flexibility ""

The built-in Intel HD Graphics 5500 graphics card won't run 3D games unless you turn down the quality settings a lot, and it's not ideal for video editing. But simpler games like Minecraft work, and it's compatible with Steam In-Home Streaming, so you could connect the Cubi to your TV and play Steam games from a bigger PC in another room.

Another selling point is energy efficiency: our tests showed that the Cubi uses less than 30 watts, even when working to the maximum. Those figures are remarkable for a full-blown PC.

Some of that energy is still wasted as heat, which has to be pumped out by a fan, meaning the



Cubi is not entirely noise-free. Still, it's incredibly quiet, and if you use the supplied bracket to mount it on the back of your TV, the sound is largely blocked. As well as an **HDMI** port for HDTV sets, there's a mini DisplayPort monitor connection - and you can use both at once for dual screens.

Both Gigabit Ethernet and the latest 802.11ac Wi-Fi are included, along with four USB 3.0 ports. You'll need to slot an SD card reader into one of those to use memory cards, but these are very cheap.

At £300, the Cubi 008X is excellent value, although it doesn't include Windows, which will cost you about £80 (it's compatible with Windows 10). You could install a version of the open-source operating system Linux instead. For a more powerful system, we'd consider Intel's NUC with an i5 processor, at around £310 without memory or storage. But if mid-range performance suits you, the Cubi is a great choice and offers greater flexibility.

SPECIFICATIONS

2GHz Intel dual-core i3 5005U • 1x mSATA 6Gbps interface • 4x USB 3.0 ports • 1x Gigabit Ethernet ports • 802.11ac • Bluetooth 4.0 • HDMI port • Mini DisplayPort • 35x111x115mm (HxWxD) • One-year warranty www.snipca.com/17331



HOW WE TEST

Computeractive is owned by Dennis Publishing, which owns a hi-tech facility for testing the latest technology. You'll often read references to our benchmark testing, which is a method of assessing products using the same criteria. For example, we test the speed of every PC and the battery life of every tablet in exactly the same way. This makes our reviews authoritative, rigorous and accurate

Dennis Publishing also owns the magazines PC Pro. Computer Shopper, Web User and Micro Mart and the website Expert Reviews (www.expertreviews.co.uk). This means we can test thousands of products before choosing the most relevant for Computeractive.

FAIR AND IMPARTIAL

Our writers follow strict guidelines to ensure the reviews are fair and impartial. The manufacturer has no involvement in our tests.

OUR AWARDS



We award every product that gets five stars our Buy It! stamp of approval. It means we were

extremely impressed by the product, and we think you will be too.



Every product that gets a four-star review is given the Great Pick award. We highly recommend these

products, although they just fail to meet the high standard of our Buy It! winners.

PRICES

Our reviews contain a link to the best price we found online at the time of press.

VERDICT: Smaller and smarter than the average mini PC



ALTERNATIVE: Zotac Zbox Nano Ci321 RL85 £130 Similarly priced, this larger mini PC has an older, slower



Reviews: Chromebook round-up

LAPTOP | £799 from www.snipca.com/17345

Google Chromebook Pixel (2015)

The best a Chromebook can get

Remember netbooks? They were the simpler alternative to laptops, with just enough processing power for web browsing and other basic tasks. There were just two problems: netbooks were too rubbish for anyone to want them. and too cheap to make manufacturers any money. So they went away. But not completely.

The day the netbook died, even if it didn't know it yet, was 30 January 2010. That was when Steve Jobs stood up and announced a new thing called the iPad. He explained why netbooks were doomed: "They're not better than a laptop at anything." Sure enough, the innovative iPad took over the world and the boring old netbook disappeared.

Today, the challenge is not only to be better than a laptop at something, but better than an iPad too. Google reckons the key to that is an operating system that makes a web browser look like a better approach to everyday keyboardbased computing than Windows, instead of being just part of it cut off from the rest.

Its operating system, Chrome OS, is the basis for Chromebook and Chromebox PCs (laptops and desktop PCs respectively), which are made by Google and other hardware companies. We tested three of the latest models.

First off, we have the Pixel, which is Google's flagship model, and mostly exists to make the point that Chrome machines aren't just cut-price PCs. At £799, it's an expensive way to surf the web. Of course, that's not all it does. Many of the tasks you'd normally use programs for, such as playing music, looking at photos and writing documents, are catered for by web apps. The difference being that they don't live on your hard drive. In fact, Chrome machines normally come with only very

SPECIFICATIONS

Intel dual-core i5 5500u processor • 8GB memory •32GB SSD •12.9in 2560x1700-pixel display • 720p webcam • 802.11ac Wi-Fi • Chrome OS • 15.3x298x225mm (HxWxD) • Two-year warranty www.snipca.com/17345



small amounts of SSD storage.

The assumption is that you'll have a fast internet connection and store everything in the cloud. With the Pixel, you get 100GB of Google Drive storage for three years (most Chrome machines come with two years), after which it costs \$1.99 (about £1.25) a month, though 15GB will continue to be free. The Chromebook's physical storage stores things temporarily when you're offline, but many of the web apps you might want to use won't work without an internet connection.

ff It's expensive for Chrome OS, but offers a great display and fast performance ""

The super-slim Pixel has a modest 32GB of storage, but a generous 8GB of memory and a mid-range 2.2GHz Intel i5 processor. That's an awfully high specification for web apps. You can even pay £200 more and get a 2.4GHz i7 processor and 16GB. But all this performance doesn't fix Chrome OS's basic limitation: no programs. Even online services don't necessarily work; Skype won't, so you have to use Google's nearest equivalent Hangouts.

A better use of your money is the lovely screen. At 2560x1700 pixels, it's an extra-sharp HiDPI (or Retina) display, and also responds to touch, so you can choose between tapping and swiping the screen or the high-quality glass trackpad. The screen is half-way between an iPad's dimensions and widescreen, while the keyboard feels great to use.

Playing video, the Pixel's battery lasted just short of 11 hours in our tests. Most tasks will use less power, so you can expect longer. And thanks to the USB 3.0 Type-C connection (similar to Apple's new MacBook) just 15 minutes of fast charging gives you two hours of use. Unlike Apple, Google provides two sockets, one on each side, and standard USB ports as well.

All right, Google, you've made your point. We like it. But £799 for Chrome OS is too much.

VERDICT: If Chrome OS works well for you and you're made of money, this could be your perfect PC



ALTERNATIVE: Toshiba Chromebook 2 Full HD £250 It can't match the Pixel's display or performance, but it's a close contender at a third of the price

LAPTOP | £215 from www.snipca.com/17373

Dell Chromebook 11 (non-touch)

The next-generation netbook?

If netbooks were popular with anyone, it was schools, always keen on simple machines that aren't too expensive to replace when they get broken. Dell's Chromebook 11 is certainly aimed at this demographic, but its practical construction will have broader appeal.

While the chunky shape looks clumsy compared to today's elegant aluminium ultrabooks, the black plastic finish hides scuffs and fingerprints pretty well, and is matt enough to stop it slipping through your fingers, while rubber bumpers protect the edges. Dell points out that the Chromebook 11 has passed US Military Standard testing for durability, pressure, temperature, humidity, shock and vibration.

SPECIFICATIONS

Intel dual-core Celeron N2840 processor • 4GB memory • 16GB SSD • 11.6in 1366x768-pixel display 720p webcam • 802.11ac Wi-Fi • Chrome OS • 4.6x295x201mm www.snipca.com/17373

Our favourite feature is the sealed keyboard, which can survive a cup of tea being spilled. Though the keys feel fine, the touchpad isn't so good, but it's not bad enough to persuade us to pay the £50 extra for a touchscreen model, even with a tough Gorilla Glass front. The display folds back to a horizontal position on a hinge designed for rough treatment - it doesn't go the whole way round to use like a tablet. Unfortunately, the screen isn't overly bright or colourful. A better feature is the speakers, which are designed to be heard across a classroom.

With an Intel Celeron processor and 4GB of memory, performance is perfectly adequate, and the 16GB SSD is enough for a Chrome machine. Battery life is fair, at seven-and-a-half hours of video playing. It may not look futuristic, but we wish more PCs were built like this.

VERDICT: A superbly sturdy little laptop that you can take anywhere without worrying



GREAT PICK

ALTERNATIVE:

HP Chromebook 11 G2 £149 It has only 2GB of memory and the screen isn't as good as the original, but HP's smallest Chromebook feels neat and stylish

PC | £190 from www.snipca.com/17374

Asus Chromebox M031U

Chrome OS in mini-PC form

It's not quite as tiny as the MSI Cubi (see page 19), but the Asus Chromebox is one of the smallest PCs you'll come across. A combination of textures gives its plain black case an intriguing look, and like the MSI it's almost silent; you'll only notice the fans when they first spin into action.

Unlike Chromebooks, the Chromebox M031U has a Gigabit Ethernet port that lets you cable straight to your broadband router. There's also 802.11n Wi-Fi (not quite as fast as the 802.11ac supported by some machines), two USB 3.0 ports, an SD card reader, and a choice of HDMI and DisplayPort sockets to connect a monitor. Remember to budget for that too, plus a keyboard and

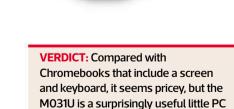
SPECIFICATIONS

Intel dual-core Celeron 2955U processor • 4GB memory • 16GB SSD • Gigabit Ethernet • 802.11n Wi-Fi • Chrome OS • 42x124x124mm www.snipca.com/17375

mouse or trackpad.

The Celeron processor in this model offers similar performance to the Dell Chromebook 11 (see above), and we had no trouble editing spreadsheets, streaming HD video and tweaking photos. Using Chrome OS on a PC is actually something of a revelation, because you never have to go offline, and with a full-size screen and keyboard it feels just like using a Windows desktop computer.

You could also use the M031U as a media centre: there are apps for Google Play Movies and Netflix, for example, and whatever you can find on the web is here. As a truly low-cost desktop PC, the Chromebox makes a lot of sense, as long as you can live without the more advanced features of full Windows programs.





ALTERNATIVE: HP Chromebox CB1-030NA £179 With the same basic specs as the Asus (except it has slower

Ethernet), this bargain PC looks cool in white

Reviews

PHOTO-EDITING SOFTWARE | £8.57 (per month) from www.snipca.com/17376

Adobe Photoshop CC (2015)

The world's best image-editing program

Photoshop isn't just a PC program, it's a verb. Nobody ever looks at a celebrity on a magazine cover and thinks, 'Hmm, I bet she's been Corel PaintShop Pro'd'. In short, there's no disputing that Adobe's photo editor (currently celebrating its 25th year) is the first choice. The question is whether it's the right one for you.

Until recently, that dilemma was probably decided by its price - over £500. But these days Adobe would rather rent out software than sell it, so to get and use Photoshop you need a subscription to Creative Cloud. The 'cloud' part is a bit of a misnomer: Adobe does offer various handy online services, like storing colour palettes and exchanging documents with the company's various apps for Apple iOS, Android and Windows Phone. But

ff Editing photos is only a small part of Photoshop, but it's still the best for that ""

Photoshop itself is still a normal Windows program that lives on your hard drive. It just checks in with Adobe each time you launch it to make sure you're still paying your monthly fee. If 30 days go by without confirmation, it'll stop working.

A full Creative Cloud subscription - all the software you'd need to run a graphics studio, publish a magazine, design a website or edit a movie – costs £47 per month. This represents excellent value but overkill for most of us. The Photography option just gives you Photoshop and Lightroom (see our review, Issue 453) for a reasonable £8.57 per month, although you have to sign up for a year.

This price includes all upgrades, and

SYSTEM REQUIREMENTS

Windows 7 or later • 2GB memory (8GB recommended) • 512MB of video memory (1GB recommended) • 2GB of available hard-drive space • Also available for Mac OS X 10.8 or later www.snipca.com/17379



Adobe adds features continuously. This 2015 version of Photoshop CC has some good new bits, even if nothing stands out.

Dehaze is a useful filter for photos taken facing towards the sun or that, for whatever reason, come out with low contrast. We found it mostly worked well: just watch out for false colours appearing on some pictures.

Dehaze lives in the Camera RAW module, which appears when you open raw images taken with more advanced digital cameras. Unlike JPEGs, these images have not been pre-processed, so you have more scope to adjust colour and tone without pushing things too far. You can also open Camera RAW as a filter and use it on any photo. Earlier this year, it gained options to combine photos into HDR (high dynamic range) images and panoramas, making even more eye-popping pictures possible.

If you use Photoshop for work projects, you might sometimes need pictures that you haven't taken yourself. The Fotolio image library is now integrated into Photoshop, so for £7 you can license a picture of almost anything and use it immediately.

One significant new feature is Artboards, which lets you create multiple 'pages' within each document. You wouldn't normally use this to create actual pages, rather for different versions

of a website designed for varying screen dimensions, or perhaps a project incorporating different items that you want to see all at once. And we're interested to see what happens with Design Space, an experimental feature that lets Adobe create new interfaces for different ways of using Photoshop.

As you can see, actually editing photos is quite a small part of what Photoshop is about these days. But overall it's still the best at that. If you prefer to buy rather than rent, Corel PaintShop Pro X7 and Serif PhotoPlus X7, at £60 and £80 respectively, are the closest rivals. If you just want to tweak photos, there are much simpler programs again, but Photoshop offers so much more depth if you don't mind spending more time figuring out where everything is.

VERDICT: You shouldn't be put off by the subscription model - Photoshop is more affordable and more capable than ever



ALTERNATIVE: Serif PhotoPlus X7 £80 Missing



a few features compared with Corel PaintShop, but feels more approachable and has better raw editing

Reviews

PC MONITOR | £277 from www.snipca.com/17332

AOC Q2577PWQ

A monitor with unusual dimensions

When it comes to monitor size, your choices are limited. Oh, sure, displays come in all dimensions. There's a screen at the Odeon bigger than your house, and there might be a screen on your watch. But you're not going to plug either of them into the back of your PC. There are monitors that say "Replace toner" or "Your bank will not charge you for this transaction", but they're no good for Microsoft Word.

Proper PC monitors are basically 24 inches or 27. You could still find a 19in, but why cramp yourself? You could pay extra for a 32, but who has the space? No, the dull fact is that in PC screens, two sizes fit all.

But wait! Here's not a 24in, not a 27in, but a 25in monitor. It's not unique: Dell's UltraSharp 25, for example, offers a very similar specification at a similar price. Beyond that, though, comparable rivals are few and far between. There's LG's 25in UltraWide, but while it may have the same diagonal measurement, it's a completely different shape. Well, not completely - it's still a rectangle. But a mathematically dissimilar rectangle.

The Q2577PWQ packs as many pixels into its 266 square inches as a typical high-quality 27in screen spreads over 311, so it looks sharper. However, until you fiddle with Windows' scaling options most of the text you see will be slightly too small. Still, if you often need to use three apps at the same time and have the eyesight of a fighter pilot, it's ideal.

Colour reproduction is either excellent or mediocre, depending on exactly what you want to use it for. The Q2577PWQ does a lovely job of rendering the bog-standard sRGB colour space in which most content operates. The full Adobe

SPECIFICATIONS

25in IPS LCD • 2560x1440-pixel resolution • 1x HDMI 1.4 port • 1x DVI port • 1x DisplayPort • 1x VGA port • 1x 3W stereo speakers • 465x570x200mm (HxWxD) • Three-year warranty www.snipca.com/17333



RGB space preferred by creative professionals, however, is not so well served, but then you have to expect that for under £300. A weak pair of speakers is the only extra feature (there's no USB hub, for example). The plastic bits are sturdy, slim and stylish, though, and there's plenty of adjustment thrown in, including portrait rotation.

Perhaps it's appropriate that a display notable for its intermediate format turns out to be exceptionally average. But that's a bit unfair on the Q2577PWQ, which is a neat and practical screen that dares to be different, in its own small... well, medium-sized way.

VERDICT: It's unusual on paper, but this decent monitor would suit almost anyone



ALTERNATIVE: BenQ GW2765HT £290

No USB hub, and less elegant, but you get 27 full inches of high picture quality, with faster response time



The best... Quality earphones

Soundmagic E10

£30 from www.snipca.com/17416 The earbuds that came with your smartphone or music player probably aren't doing justice to your music. A cheap pair from elsewhere might be no better, but pay a bit more and vou'll be surprised at the difference. The E10, for example, produce rich, detailed bass. They also go a little louder than most, and come in black and red. The E10S model (£40) adds a mic for phone calls.

Sennheiser CX 300 II

£25 from www.snipca.com/17428 These also come in red or black and maintain Sennheiser's reputation for solid audio performance at a reasonable price. Treble could be crisper, but the CX 300 II are great value and have a flat cable design that prevents tangles and the 'microphonic effect' where touching the cord makes a boomy sound in your ear.

Rock Jaw Alfa Genus

£42 from www.snipca.com/17429 Despite the wacky name, these earphones have a lovely traditional styling in wood and aluminium. Their unique feature is a set of three alternative screw-in filters for different tone, so you can choose your favourite. There's a microphone in the cable

M by Maxell MXH-DBA700S

for phone calls.

£42 from www.snipca.com/17430 These classy earphones can be found well below their £90 recommended price. Unusually, they combine a balanced armature design, for more detailed high frequencies, with a dynamic driver for big bass. It works, but they need time to burn in to sound at their best. The tangle-

free cable has a mic.

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- Windows 8.1

£299 Inc VAT

The V1 is a very capable entry-level system perfect from basic home/office tasks. It's based around the dual-core Intel® Pentium® G3240 processor, 4GB of RAM plus a 500GB hard disk.





Scan V15 Value System Home / Office PC

- Intel® Core™ i5 4460 processor
- 8GB Corsair DDR3 1600MHz memory
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£475 Inc VAT

The V15 ups the ante by including a quad-core Intel® Core™ i5 4460 processor, so it makes light work of office and multimedia applications.





Scan G20 Value System Gaming PC

- Intel® Pentium® G3240 processor
- 8GB Corsair DDR3 1600MHz memory
- 2GB NVIDIA GeForce GTX 750 Ti SSC
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£479 Inc VAT

Thanks to its dual-core Intel® Pentium® G3240 processor and NVIDIA GTX 750 Ti SSC graphics card the G20i is our most affordable gaming PC. It even includes surround sound!





Scan G30i Value System Gaming PC

- Intel® Core™ i5 4460 processor
- 8GB Corsair DDR3 1600MHz memory
- 2GB NVIDIA GeForce GTX 960 SSC ACX
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£659 Inc VAT

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- 1TB Seagate HDD
- Windows 8.1
- 3 Year Premium Warranty

£999 Inc VAT

The 3XS Gamer 20i is a super-fast gaming PC thanks to its combination of quad-core Intel Core i7 4790 CPU running at 3.6GHz with added Hyper-Threading plus a 4GB NVIDIA GeForce GTX 970 graphics card. These components are installed in an Asus Z97-K motherboard along with a 1TB hard disk.





Scan 3XS Z97 Vengeance Gaming PC

- Intel® Core™ i7 4790K processor overclocked up to 4.7GHz
- 8GB Corsair DDR3 2133MHz memory
- 4GB NVIDIA GeForce GTX 980 SC
- 250GB Samsung 850 SSD & 2TB HDD
- Windows 8.1
- 3 Year Premium Warranty

£1445 Inc VAT

This high-end gaming system includes a water-cooled Intel Core i7 4790K CPU overclocked up to 4.7GHz plus a 4GB NVIDIA GeForce GTX 980 graphics card, 8GB of 2133MHz Corsair Vengeance Pro DDR3, 250GB SSD for lightning quick gaming loading and a 2TB hard disk.





3XS Graphite LG157 Gaming Laptop

- Intel® Core™ i7 4720HQ processor
- 8GB Corsair DDR3 1600MHz memory
- 2GB NVIDIA GeForce GTX 960M
- 15.6in 1,920 x 1,080 screen
- 1TB SATA 6Gb/sec hard drive
- Windows 8.1



3XS Graphite LG1720 Gaming Laptop

- Intel® Core™ i7 4720HQ processor
- 8GB Corsair DDR3 1600MHz memory
- 3GB NVIDIA GeForce GTX 970M
- 17.3in 1,920 x 1,080 screen

£1075 Inc VAT

- 1TB SATA 6Gb/sec hard drive
- Windows 8.1

£869 Inc VAT

The LG157 is a 15.6" mid-range gaming laptop that includes a NVIDIA GeForce GTX 960M graphics card plus an Intel Core i7 4720HQ CPU, up to 16GB of RAM and multiple hard disks and SSDs. The LG157 is ready for next-day delivery and is protected by a 2 Year Premium Warranty.



The LG1720 is a 17.3" high-end gaming laptop that includes a choice of powerful NVIDIA GeForce GTX 970M or 980M graphics card, ensuring silky

970M or 980M graphics card, ensuring silky smooth frame rates in all games. The LG1720 is ready for next-day delivery and has a 2 Year Warranty.

8.1

Windows

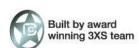
Microsoft

Scan Computers recommends Windows.

3XS Custom Series

Our 3XS Custom Series is a range of computers designed to offer the best performance for a variety of applications, with a particular focus on games. We build Custom Series PCs to order, so we can configure and tailor make an individual PC just the way you want it. We can also overclock the processor, so you get a faster PC without a substantial increase in price. All 3XS Custom Series PCs are covered by a three year warranty as standard with the first year on-site.









Reviews

PRINTER | £79 from www.snipca.com/17334

Canon Pixma MG6650

The only big black box you need

We go on about how our phones do everything that cameras, libraries and record players used to do, but don't overlook the humble printer/scanner. It does everything phones don't, converting printed paper into digital files and vice versa. Canon's range has been a favourite of ours for some time, and this latest all-in-one maintains those high standards. The only thing it misses is faxing, which is obsolete for most of us.

Touchscreens on printers are no longer seen as an expensive gimmick, and the MG6650's is big and clear, even if it requires more of a prod than a touch. It certainly helps to have options you can point at directly because there are lots of options on a machine like this, as well as





Wi-Fi networking to set up and occasional troubleshooting.

Over Wi-Fi, you can use Canon's Printing Solutions app to output documents from your mobile device. Apple devices will also connect via AirPrint, so the Print option in any app will recognise the MG6650 if you're on your home network. If you're further away, Google Cloud Print and Pixma Cloud Link still work over the internet, should you have a reason to print something when you're away from home.

The five-ink system uses different blacks for photos and text, although you don't get the additional grey that some Canon models use for subtler shading. This works well for all kinds of documents, while photos look even better on the MG6650 than those produced by its predecessors, and they print slightly

SPECIFICATIONS

4800x1200dpi maximum print resolution • 10ppm colour and 15ppm mono quoted speeds • 1200x2400dpi maximum scan resolution • USB 2 802.11n • SD card reader • 148x455x369mm (HxWxD) • 6.4kg • One-year warranty www.snipca.com/17335

faster (52 seconds for 6x4in in high quality). Copying a photo print added only three seconds, and scanning it to our PC took just 35 seconds. With no automatic paper input, it's not great for multiple photocopies, but more than adequate for occasional duplication, and it lets you print both sides of the paper (duplex).

With five separate tanks, you only replace the ink you need. Buy the XL cartridges and running costs work out at 7.7p per colour page or 2.4p for blackand-white, which is reasonable. The MG6650 is a very affordable all-in-one that does a great job all round.

VERDICT: It may look like something James Bond would have to defuse, but this low-cost all-in-one is user friendly



ALTERNATIVE: HP Officeiet Pro 8610 £109 This A4 multifunction printer offers automatic copying of multiple pages



WHAT SHOULD I BUY? We solve your buying dilemmas

Can I buy a mini PC that takes a TV tuner card?

I've read your reviews of mini PCs and have a question. As the owner of a dedicated media centre PC, I'd love one of these, but only if I can install a TV tuner card. I know from experience that USB sticks are not as good as a proper card. Does such a creature exist?

Roy Houghton



Sadly not. The very smallest PCs, such as the MSI Cubi reviewed on page 19, are

designed around a minimum of components, and by their nature have no room for internal expansion cards.

But we'd raise two points here. First, there's no significant difference in performance between internal and external TV tuner cards. A range of USB sticks are available to receive terrestrial, cable and satellite broadcasts, as well as external boxes - like Elgato's EyeTV Sat Free (www.snipca.com/17413, pictured) - which connect via USB. As long as you can feed in a good signal (preferably not

relying on the built-in aerial), USB should be fine - and if you can't, you won't get good results from an internal card either.

Secondly, maybe a TV tuner suits your purposes, but more and more services are available over the internet now. It's something to think about if you're planning your digital viewing for the future.

Do you need advice on what you should buy? Email us at letters@computeractive.co.uk

PHONE | £125 from www.snipca.com/17338

Vodafone Smart Ultra 6

active BUY IT!

High-performance budget phone

Over the page, we review the Sony Xperia M4, a very attractive phone for £210. The Smart Ultra 6 offers similar features for only £125, or £17 a month on contract with Vodafone (its exclusive vendor). It has the same fast processor as Sony's phone, the same Android 5.0.2 software (Lollipop), and a bigger screen with 1080p Full HD resolution. And its rear camera, with the same 13-megapixel rating, takes nicer pictures.

So what's the catch? Well, you may not want to be on Vodafone's network. It's also one of the most generic-looking phones we've ever seen. It's like one of those fake phones in an advert or a TV programme, where

they can't show a real brand, so they've carved something phone-shaped out of sculpting foam and painted it black. In fact, if Apple's design guru Sir Jonathan Ive was delivering a lecture on minimalist design and wanted to illustrate that simplicity alone wasn't enough, he could hardly find a better example.

Unlike the Xperia M4 Aqua, the Smart Ultra 6's case is not metal, nor is it waterproof. It's also noticeably thicker. There are forward and back buttons below the screen, an idea conceived to save space when screens were small. This screen is huge, so the buttons are unnecessary. Battery life is a little longer than the Xperia, at 10 hours 51 minutes of continuous video playing, but the screen is as dull as the design.

Performance is basically the same, however, which is a stunning achievement at this price. And you get a reasonable 16GB of storage (4GB is taken up by the operating system), as well as a microSD slot to add more if needed. Despite some reservations, the Smart Ultra 6 is an incredible bargain with no major functionality flaws.

SPECIFICATIONS

5.5in 1920x1080-pixel screen • 13-megapixel rear camera • 5-megapixel front camera • 802.11n Wi-Fi • 3G/4G • 154x77x8.4mm (HxWxD) • 159g • One-year warranty www.snipca.com/17339

VERDICT: This isn't the perfect phone, and it looks nothing special, but as long as you want to be on Vodafone, it's an amazing deal



ALTERNATIVE: Motorola Moto G 4G (2nd Gen) £140 Our favourite cheap phone has better build quality and screen – but a new version is coming







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Reviews

PHONE | £210 from www.snipca.com/17336

Sony Xperia M4 Aqua

An impressive smartphone at a reasonable price

There are a lot of amazing smartphones around these days, but some specifications look too good to be true. Well, here's a new model with a slim metal case and a glass rear, high-resolution cameras, a big screen and one of the latest lightning-quick processor chips, vet costs just over £210 to buy outright. It's even waterproof. Surely some mistake?

The M4 Aqua does look gorgeous. It comes in black, white or 'coral', which is more red than pink and gives you a tasteful and unusual option. And no, you can't get it in aqua – this refers to the waterproofing aspect, which is better than most devices that claim 'water resistance', covering full submersion up to a depth of 1.5 metres for 30 minutes. The USB charging port stays watertight without needing a fiddly rubber cap, while the nylon corner pieces give you a little bit of bump protection.

f It's a fast, durable and excellent phone for the money ""

This is quite a big phone, but not overly so, and it's surprisingly light. The display is a little bigger than an iPhone 6 but has slightly fewer pixels, so it doesn't look as sharp, and we were disappointed by its colour accuracy – everything looks rather bluey-grey. It's bright, though, and there's sufficient detail.

What probably matters more is that what's on the screen responds quickly and smoothly to your touch. You still can't take that for granted in cheaper smartphones, but the M4 Aqua's eight-core Snapdragon 615 processor zooms through everything without a stutter. While it's not the fastest processor around, it's in the same league as many more expensive phones, and is designed particularly with multimedia in mind. Even the most advanced Android games work fine.

Performance doesn't come at the



expense of decent battery life. Playing videos continuously, the Xperia M4 Aqua lasted 10 hours 16 minutes,

which is quite acceptable. If you need longer, Sony's Stamina mode turns off all the background activity that's usually burbling away, leaving only essentials like incoming phone calls. You can still use all your apps, and the phone can last up to two days.

The M4 Aqua's cameras are also notably high-spec on paper; in use, not quite so much. Although we always tell you megapixels aren't everything, you could be forgiven for thinking 13 megapixels in a phone sounds pretty good. When we started taking pictures, however, we began to wonder if 'Aqua' had a hidden meaning. The photos looked blue and washed-out on the M4's screen - and anywhere else we opened them.

This didn't sit well with Sony's claim of 'perfect shots every time'. It could just be poor automatic white balance, something that could be fixed with a software update. But we weren't happy with any of our outdoor shots. Inside, everything looked better, and the camera coped well with fairly dim light. Even so, you'd get better pictures from other phones with fewer megapixels.

And the extra resolution comes at a cost: your image files take up more

SPECIFICATIONS

5in 1280x720-pixel screen • 13-megapixel rear camera • 5-megapixel front camera • 802.11n • 3G/4G • 146x73x7.3mm (HxWxD) • 136g • One-year warranty www.snipca.com/17337



storage space. That's ironic, because the M4 Aqua comes with just 8GB of flash memory, of which 4GB is taken up by the Android 5.0.2 Lollipop operating system. The remaining 4GB is barely enough to download a couple of HD films from the Google Play store. The idea is that you add a microSD card for more: you could get 32GB for less than a tenner, or 128GB for £60. MicroSD cards don't tend to be as fast or reliable as built-in flash memory, though, so we wouldn't recommend relying completely on them.

We can't quite give the M4 Aqua full marks, because photo quality is important, the dull screen affects everything, and selling any device with only 4GB of free storage is not a trend we like. But all things considered, this fast and durable device is an excellent and elegant phone for the money.

VERDICT: Mid-range smartphones don't get much better than this, but budget for an SD card and take the camera claims with a pinch of salt



ALTERNATIVE: Samsung Galaxy A3 £190 If you prefer a smaller phone, the Galaxy's screen and camera are better - but it's not as fast



CAMERA | £349 from www.snipca.com/17343

Nikon 1 [5

Big specs from a little camera

Compact system cameras (CSCs) combine the simplicity of point-and-shoot with the interchangeable lenses of DSLRs. There are plenty to choose from, but the Nikon 1 series has always stood out. These little cameras can capture bursts of shots at breakneck speed, which allows for slow-motion video and the option to take a load of pictures then choosing the best to save.

Compact with good image quality, but performance is inconsistent ""

The J5 now adds 4K video recording, but here speed is nothing to write home about; you only get a juddering 15 frames per second, making everything look like a Czech cartoon from the Soviet era.

Previously, the priority and manual shooting options (for photographers who want full control of their shots) were relegated to a sub-menu, but on the J5 they're on the main dial. A second dial and rear wheel control other settings, and there's a customisable Fn (function) button on the front, and touchscreen access for everything else. Meanwhile, the tilting screen makes it comfortable to shoot at different angles.

Like its predecessors, the J5 can capture 20 shots at up to 60 frames per second (fps). At 20fps it can even autofocus each time, but the results were more miss than hit for us, and the camera then made us wait 40 seconds while it saved the photos to the microSD card. You could miss some crucial action

SPECIFICATIONS

20-megapixel sensor • 3x zoom (27-81mm) • 1080p HD video • 4K video (15fps) • 3in screen • MicroSD card slot • 62x109x60mm (HxWxD) • 345g • One-year warranty www.snipca.com/17344



shots in that time.

Normal shooting performance was also annoyingly slow. We had to wait up to three seconds between shots, although this fell to half a second when we disabled image reviews after capture. Rival cameras don't force you to choose.

The J5 is impressively tiny, partly because its sensor is smaller than others, which can limit image quality. Still, the J5 held its own, showing a visible advantage over basic compact cameras and smartphones. If you want shallow depth of field, for blurred backgrounds, nothing beats a big sensor. We found the J5 was more likely to blur the subject because of its tendency to pick slow shutter speeds on auto in low light.

We really like the design of the J5, but rivals such as the Sony Alpha A5000 offer faster performance and higher image quality, and generally cost less. If multiple lenses aren't essential, we'd spend £400 on the Sony RX100 II, which has one great lens for superior image quality in an even slimmer, lighter body.

VERDICT: Strong on design and image quality, but performance is annoyingly inconsistent



ALTERNATIVE: Sony Alpha A5000 £249 A new

low price makes this capable allrounder more appealing



COMING SOON

AUTUMN 2015

According to reports, this vear's iPhone 6s could have Force Touch - as on the latest MacBooks - letting you perform different tasks depending on how hard you press. Another possibility is a big camera upgrade.



AUTUMN 2015

Google's next Nexus phone will introduce the Android M operating system. It's widely expected to be an update to the medium-sized Nexus 5

with a faster processor, but both LG and Huawei are being talked about as possible manufacturers. Fingerprint scanning is a likely feature.

AUTUMN 2015

Europe's biggest tech show, IFA, takes place in Berlin from



4 September. We could see new Windows 10 tablets, Samsung and Sony are likely to reveal phones ahead of Apple's next iPhone, and there are hopes of a new watch from Motorola.

2016

Hard drives are big and cheap, while SSDs are fast and expensive. That won't change any time soon, but Samsung's announcement of the first 2TB (1,000-gigabyte) consumer SSDs is a step in the right direction.

NEXTISSUE

Chillblast **Fusion Centurion**

A great-looking PC with an outstanding new processor



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Our pick of products that have won the Buy It award

LAPTOP

Asus X555LA-XX290H £300 from www.snipca.com/16158 Tested: Issue 446



Asus has made all the right choices with this budget Windows 8.1 laptop. Its comfortable keyboard, fast performance, respectably lengthy battery life and bright screen are all the more impressive given its low price.

ALTERNATIVE Asus Chromebook C200

A cheap Chrome OS ultra-portable laptop with a bright screen, lengthy battery life and a great keyboard. £220 from www.snipca.com/17296

DESKTOP PC

PC Specialist Trion 960

£650 from www.snipca.com/17254 Tested: Issue 454

You could spend less on a usable PC. but this solid tower system has great all-round performance, including decent



Nvidia GTX 960 graphics card. A 120GB SSD and 1TB hard drive offers speed and space, but Wi-Fi costs £15 extra.

ALTERNATIVE: Palicomp Intel i5 Elite

For £50 less, this is a similar PC in many respects but compromises on graphics with the cheaper GTX 750 card. £600 from www.snipca.com/17297

COMPETITION

Win 1 of 2 **ZOTAC Zbox Nano Ci321 PC**

Winner of a four-star 'Great Pick' review in Issue 453, the **ZOTAC Zbox** Nano Ci321 is a neat, flexible and affordable media PC. It's very small and - being fan-free - completely silent. By adding memory and a hard drive, then mounting it to the back of an HDTV, you'll create a homeentertainment centre. It comes with an HDMI socket, four USB 3.0 ports. Ethernet and fast 802.11ac Wi-Fi. To enter email your address to cacomp@ dennis.co.uk by midnight 18 August.

The ZOTAC Zbox Nano Ci321 is available to buy now for £130 from www.snipca.com/16967. For more information visit ZOTAC's website (www.zotac.com) and follow ZOTAC on Twitter @ZOTAC.

PHONE

Samsung Galaxy A3

£190 from www.snipca.com/17193 Tested: Issue 454



Similar in size to an iPhone 6, this Android phone doesn't have a high-res screen or high-end performance for advanced games and creative apps, but it lasts over 14 hours on a charge, has a great camera and is reasonably priced.

ALTERNATIVE: Sony Xperia Z1 Compact We recommended this back in March 2014 (Issue 419) and it's still a great phone. £205 www.snipca.com/11579

WEB DESIGN

Xara Web Designer Premium 11

£70 from www.snipca.com/16955 Tested: Issue 453



This visual web-design program makes creating sites more like laying out a document than writing HTML code, and sites can be 'responsive', meaning they look right on both big and small screens without extra work. A basic version is also available for half the price.

ALTERNATIVE: Serif WebPlus X8

Comes with lots of templates, but creates separate Desktop and mobile versions instead of responsive sites, and can be slow to use. £90 from www.snipca.com/14964

TABLET

Apple iPad Mini 2

£239 from www.snipca.com/14467 Tested: Issue 416



Apple's mini tablet from 2013 is now available at an even lower price. The only thing it lacks compared with the Mini 3 is a fingerprint sensor and the option of lots of built-in storage. Otherwise, it's an absolute bargain.

ALTERNATIVE: Apple iPad Air 2 A thin and lightweight 10in tablet with a fingerprint reader, an excellent screen and peerless selection of apps. £399

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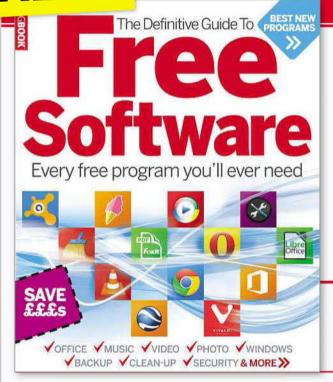
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Workshops & Tips





14 pages of easy-to-follow workshops and expert tips

- 35 Stop Windows 10messing up your software38 Find out how otherpeople use your PC
- **40** Get phone alerts that are actually useful
- **42** Control your PC without a mouse
- PLUS
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- 47 Make Office Better
- **48** Secret Tips For... Google Photos

Stop Windows 10 messing up your software

What you need: Windows XP, Vista, 7, 8.1 or 10; USB stick Time required: 1 hour

One of the biggest concerns when upgrading your PC's operating system is that you may have to download all your programs again, then tweak their settings to how you had them before. Even though Microsoft have assured users that upgrading from

Windows 7 or 8 to Windows 10 should not affect your programs, it's a good idea to be on the safe side. The brilliant new free tool CloneApp lets you back up all your existing software settings, then migrate them to your upgraded, formatted or new PC.



Here's an outline of what we'll be doing in this Workshop. We'll first show you how to back up your program's settings. Then we'll show you how to save your files and folders for export to your new PC or simply as a backup if you're upgrading your operating system. Next, we'll save CloneApp (with all the saved settings) to a USB stick, before exporting the settings and files to a Windows 10 PC. Finally, we'll show you how to install in one go all the programs whose settings you've saved. To download CloneApp, go to www.snipca.com/17340 and click the Download button 1.





Open the downloaded zipped file, then drag and drop the CloneApp folder to your Desktop and click it to extract the files. Next, open the folder, double-click the CloneApp setup file then click Run. When CloneApp launches, you'll see a list of over 170 popular programs on the left, including Chrome, Firefox, Skype, Dropbox, Avast Free Antivirus, GIMP, PicPick, Google Earth and Google Drive.

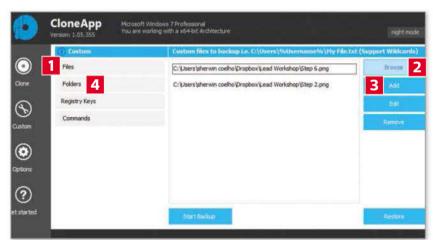
Workshops



Click any program to see which settings and files CloneApp backs up for that program **1**. Now tick the programs 2 whose settings you want to back up. If you want to re-install all the programs on your current PC, click the Select Installed link (this ticks all listed programs installed on your PC). Make sure none of the selected programs are open on your PC because this will prevent them being backed up. Finally, click the Start CloneApp button 4 to back up all the settings for these programs (the process can take a while).

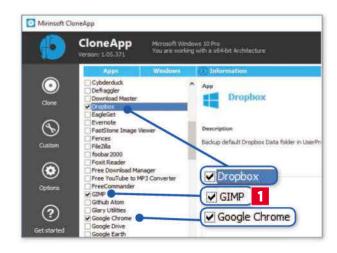


If you see a notification warning you that a file name is STEP too long for the destination folder, tick 'Do this for all current items' at the bottom, then click the Skip button. When backup is finished, you'll see a 'Backing up process completed' message 11 in the main section. To back up files and folders on your PC (for export to your new PC or for back up if you're upgrading), click the Custom option 2.

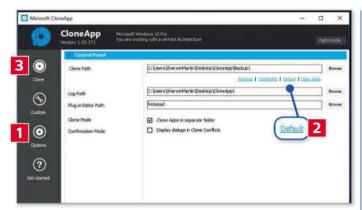


STEP Next, click Files 1, Browse 2, navigate to and select the file you want, click Open, then Add 3. To add another file, click Browse and repeat the process. Now click the Start Backup button at the bottom. Again, you'll see a message on the main screen when this process has completed. If you want to back up folders, then select Folders 4 and repeat the process. When you've finished, close CloneApp and insert the USB stick into your PC. Now drag and drop the CloneApp folder from your Desktop on to your USB stick. Again, this process can take a while depending on the number of program settings, files and folders you've backed up.

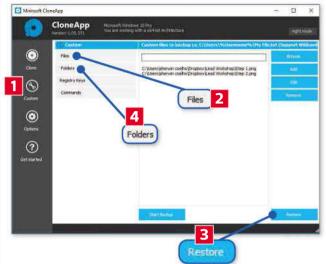
You're now ready to migrate your program settings. If you've STEP upgraded to Windows 10, check whether the programs on your PC have installed properly, along with your existing settings. If your program settings differ, uninstall all the programs you backed up to CloneApp. The best free software to batch-uninstall programs is Menu Uninstaller Pro (www.snipca.com/17431 – see the 'Uninstall multiple programs in one go' Workshop in Issue 431). The process from here is pretty much the same for both a new or formatted PC. Plug your USB stick into your PC and drag the CloneApp folder on to your Desktop. Open the folder and doubleclick the CloneApp setup file. You may see a warning telling you the program may put your PC at risk, but CloneApp is completely safe, so tick 'I understand the risk and want to run this app', then click 'Run anyway'. You'll notice that all the programs you ticked in CloneApp on your previous PC will be ticked 1.



Stop Windows 10 messing up your software



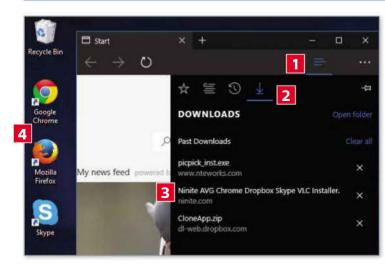
You now need to change the path to your saved program settings because this will still be set to the path on your previous PC. Click Options 1, then the Default link 2. The path will now change to the Desktop on your new/upgraded PC. Next, click Clone █, then the Restore button at the bottom right. If you see an error message saying the process failed, click the 'Clone again' button (which replaces the Restore button), then click the Restore button again. Your program settings will now be saved to this PC and you'll see a 'Restore process completed' message in the main section when it's finished.



STEP To restore the files and folders you backed up, click Custom 1, Files 2, then Restore 3. Because the file path (location) will differ from the one on your original PC, you'll see a notification prompting you to create a file path on your new/upgraded PC; click Yes. This automatically copies all your backed-up files to the new PC and creates the new path. Next, click Folders 4 and repeat the step to copy over the folders you backed up from your previous PC.



With all your program settings backed up to your new PC's STEP Registry, you can now install these programs (or most of them, at least) in one go using the free online web service Ninite. On your Windows 10 PC, go to www.ninite.com, tick to select all the programs whose settings you've backed up 1, then click the green Get Installer button 2. An installer containing the setup files of all these programs will now download to your PC. Download the programs that aren't available via Ninite from their official websites.



Edge (Windows 10's new browser) automatically scans the files you download. To see these downloads, click the three blue lines 11, the Download icon **2**, then click the Ninite setup file **3** to install it (Ninite setup files don't contain adware or unwanted add-ons). Follow the onscreen instructions to install the programs (you may need to log into those with which you have an account). As soon as they're installed, you'll see their icons on your Desktop 4. Now open any of the programs and you'll notice that they work exactly as they did on your previous PC.

Workshops

Find out how other people use your PC

What you need: OSForensics, Windows XP, Vista, 7 or 8 Time required: 20 mins

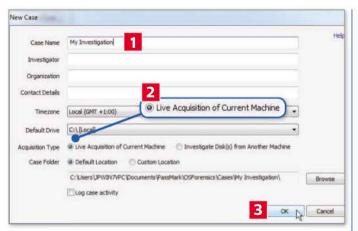
Tave you ever wondered whether nsomeone else has been using your PC? Or, if you use a shared PC at home or work, have you ever wanted to know what the other users have been up to: what programs have been used, what sites have been visited - even what USB

devices have been connected? OSForensics is a free program that lets you find out all this and more, helping you analyse all activity carried out on your computer, find out what's slowing vour PC and vou can also use it to recover deleted files.

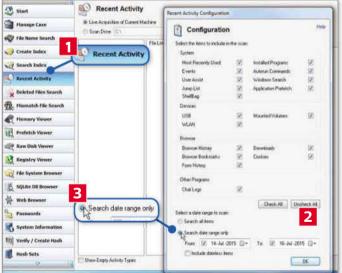


Go to www.snipca.com/17309 and click the Download button. Run the downloaded file and follow the instructions to install it (there's no hidden software to opt out of). At the end of the process, leave the Launch OSForensics option ticked and click Finish. When the program launches you'll be prompted to upgrade to the Pro version (which costs £320), but the basic program (including everything in this Workshop) is free for personal use, so click Continue Using Free Version 🛮 instead.

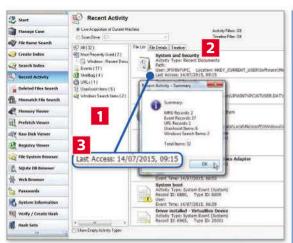




Before you start using any of the tools, you need to create a 'Case'. These are files that let you gather information and save your findings. You can export data from these Cases and produce reports based on the saved information. In the main window, click Create Case (in the Case Management section) at the top. Now type a name for your file next to Case Name 1. Adding information in the other fields is optional. Ensure 'Live Acquisition of Current Machine' is selected 2. then click OK 3.



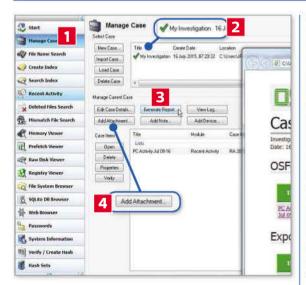
To analyse activity on your PC, click the Recent Activity STEP button **1** in the left-hand pane. Make sure 'Live Acquisition of Current Machine' is selected at the top. Click the Config button at the top right. By default, all boxes are ticked but you can click the Uncheck All button 2 and tick only the activities you want to include in your scan. Next, select the 'Search date range only' option 3 and choose a date range for which you want to monitor your PC's activity by clicking the From and To fields and selecting the dates. Click OK.



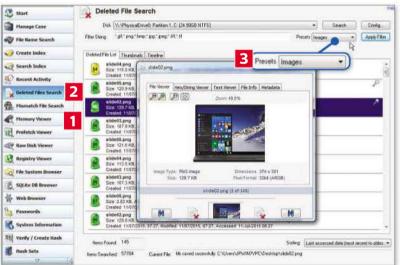
Now click the Scan button at the top right. STEP Once the scan is complete, you'll see a summary of all the items found. Click OK and browse the results. In the left-hand column **1** you'll see a list of categories. Click a category – URLs, for example – to see all the items of that type or select All (at the top) to see all items. The main pane 2 shows the items themselves, along with which PC user accessed them and when 3. By default, the results are listed by type, but you can re-order them by date, user or file name, using the Sort By menu at the bottom right.



STEP At the top of the pane you'll see three tabs 1. Click File Details for more details on each item and Timeline for a bar chart displaying when each activity took place. Now go back to the File List tab. Press Ctrl+click to select multiple items, then right-click one of them and move your cursor to 'Add to Case' 2. From here you can either add the item(s) you've selected or opt to add all the items in the activity list to your Case **3**. In the box that opens, type a name ('PC activity', for example), then click OK.



STEP Click Manage Case 11 and ensure your Case is ticked in the Select Case pane 2. In the lower pane, you should see the item you added in Step 5. Double-click it to see a report of that activity in your browser, including who last used your PC and when. You can add further activity scans if you want to continue monitoring your PC's usage over a longer period. At any time you can click Generate Report 1 to export a file summarising all the activity you've monitored. You can also attach files (click Add Attachment 4) if you want to include further information – documents that have been opened, for example.



OSForensics has many other uses. For example, to find out what STEP processes are running in your system memory, click Memory Viewer **1**. One of the program's most useful functions is the ability to scan for and restore deleted files. To do that, click Deleted Files Search 2. Now select your PC's hard drive from the Disk dropdown menu at the top. You can narrow your search - choose Images from the Presets menu 3, for example – then click Search. Right-click an item in the list that appears to view or save it.

Workshops

Get phone alerts that are actually useful

What you need: Hooks - Alerts for Everything; Android device or iPhone Time required: 15 mins

any of the alerts you receive on Myour phone aren't that relevant to you (for example, app updates or spam emails and texts). The free app Hooks lets you set up useful alerts in no time at all. These can include local weather updates, the latest scores of your

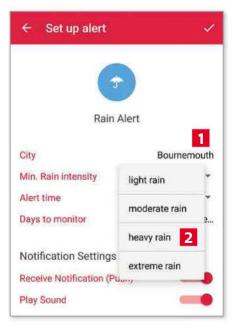
favourite football team and the winning lottery numbers as soon as they're announced. We're using the Android app (www.snipca.com/17305) for this Workshop, but the iPhone app (www.snipca.com/17306) works in a similar way.

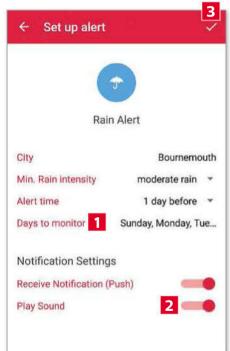


STEP Open the app and tap the '+' symbol to see three tabs. The All tab contains a list of all the available alerts you can create in categories (TV/Movies, Weather **□**, Sports and so on). The Popular tab 2 displays a list of alerts that other people have created. Simply tap the Add button beside the alert you want to add it to your list. The Suggested tab will be empty when you start using the app, but will fill up with relevant suggestions based on those you add to your list. You can also tap the search icon 3 to find specific alerts, for example by typing weather or currency exchange.

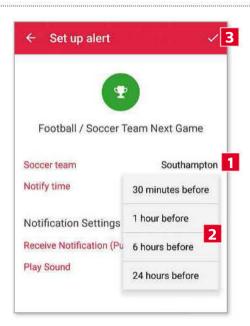


STEP We'll first create an alert that notifies you about rainfall in your location. Tap the All tab, navigate to the Weather section, then tap 'Rain Alert'. Now tap the field beside City, type the city or town you live in, then tap the search icon. You'll see a list of relevant results for your location; tap the correct one . Next, tap the dropdown menu beside 'Min. Rain intensity' and select the level of rainfall you want to be notified about 2. Now tap the 'Alert time' dropdown menu and select how long in advance you want to be notified. Options are 1, 2, 3, 5 and 7 days.

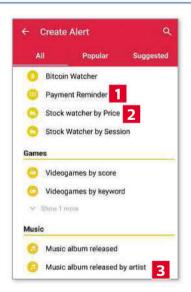




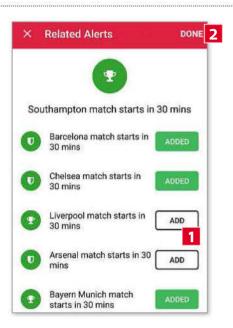
STEP Next, tap 'Days to monitor' 11 and select the days you want the app to monitor rainfall in your area. By default, all days of the week are ticked but you can untick the ones you don't want, then tap Choose. Tap the Play Sound slider 2 if you don't want to hear a notification sound. Finally, tap the tick icon 1 to create your alert. Pretty much all alerts are set up in this way, though the options and dropdown menus will vary depending on the type of alert you're setting up.



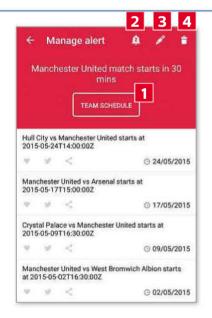
STEP With the new football season kicking off soon, you may be keen to receive notifications about your favourite team's fixtures and results. To see upcoming fixtures, navigate to the Sports section, tap 'Show more' at the bottom, then 'Football/Soccer Team Next Game'. Next, tap 'Choose a soccer team', type the name of your team, then tap the correct suggestion 1. Next, tap the 'Notify time' dropdown menu, choose how long before the game starts you want to be notified about the fixture 2, and then tap the tick icon 3.



STEP If you play the lottery, you can set Hooks to tell you the winning numbers as soon as they're announced. Scroll to the Misc section, tap 'Show more' at the bottom, then tap 'Lottery results'. Next, tap 'choose a lottery' and scroll down the list, which includes EuroMillions, EuroJackpot, Lotto and Thunderball. Tap to select the one you play, then tap the tick icon at the top. You can also use the app to remind you when a new episode of your favourite TV programme is on, to pay your bills 11, to check your stocks and shares 2 and even to tell you there's a new album by your favourite artist **3**.



STEP You'll now see a list of fixture notifications for other football teams. Tap the Add buttons **1** beside the alerts you want, then tap Done 2. To receive final-score alerts, navigate to the Sports section again, tap 'Show more', then tap Football/Soccer Team Results, tap the field beside 'Soccer team', type the name of your team, tap the correct suggestion. Now, tap the tick at the top. Again, you'll see a list of other teams' results that you can add. Tap Done after you adding the ones you want.



After setting your alerts, tap the left-pointing arrow beside Create Alert (at the top left) to see them as a list. Tap any alert for more information. Tap an alert for the football-fixture alert, for example, and you'll see a list of all your team's upcoming matches. Tap the Team Schedule button to see the list of fixtures on the ESPN website. Tap the bell icon 2 to switch the sound for that alert on or off. If you want to edit the alert (to change the team, for example), tap the pen icon **3**, then make your changes. To delete the alert, tap the bin icon 4, then Delete.

Workshops

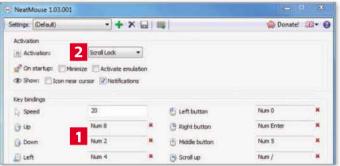
Control your PC without a mouse

What you need: NeatMouse; Windows XP, Vista, 7 or 8/8.1 Time required: 10 minutes

eatMouse is a brilliant free program that lets you remap your mouse controls to your keyboard. This is a godsend if you suffer from wrist strain after using your mouse for prolonged periods, or your mouse or laptop trackpad is fiddly, or when

your Bluetooth mouse's battery is low. Whatever the reason, NeatMouse lets you set specific keys to control your cursor's movement and activate left- and right-click actions. You can also create separate profiles for different users.

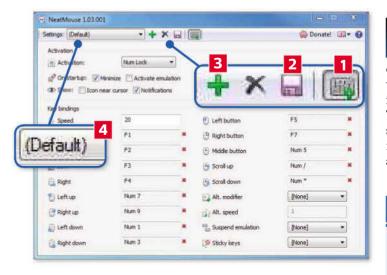




To download NeatMouse, go to www.snipca.com/17312 and click the blue Download button on the right. Next, click the downloaded setup file, Yes, Next, I Agree, Next (three times), Install, Next and Finish. You'll see a small window showing mouse functions and their default number keys 11. The Activation dropdown menu 2 shows the key you need to press to activate NeatMouse. Press that key to see a small 'NeatMouse is enabled' notification in your Taskbar. Now instead of using your mouse, press the relevant number keys to move your cursor and carry out your left- and right-click actions.



NeatMouse is highly customisable. For example, to STEP activate the program with the Num Lock or Caps Lock key instead, click the Activation dropdown menu and select one of those **1**. To launch the program at startup, tick 'Minimize' Deside 'On startup'. If you want to change a particular mouse-function key, click the 'x' icon beside its default key 3, then click inside the box and press the key you want to use 4.



STEP Click the 'More settings' icon 1 to see more key options for moving your cursor diagonally (using the 'Left up', 'Left down', 'Right up' and 'Right down' options). After configuring your keys to perform the mouse functions you want, click the 'Save settings' icon 2. Creating a custom setting is useful if you share your PC and want your own configuration. To do that, click the 'Add new custom settings' icon 3, name the setting, click OK, then follow steps 2 and 3 to configure the keys for this new setting. Click the Settings dropdown menu 4 to alternate between different custom settings.

NEXT ISSUE

- Make Windows 7 and 8 hardware faster than ever
- Protect yourself from 2015's biggest hack
- Find your PC's largest files
- Send emails that self-destruct

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TIP OF THE FORTNIGHT

Customise Microsoft Edge to suit your needs

By following Computeractive's advice, I've updated my PC to every new Windows 10 Technical Preview Build. Each build has only made the operating system better and I can't wait to upgrade my PC to Windows 10 as soon as I can.

Chrome has recently been driving me up the wall, so your Workshop on Microsoft Edge (Window 10's superb new browser) in Issue 453 could not have been better timed. Whenever you open a new tab in Edge, you'll see a page featuring website tiles (including YouTube and Amazon) that you click to open. Below the tiles is a list of news stories from a variety of sources, but they featured topics that were of no interest to me.

However, after updating to the latest

Build, I noticed a new Customise link at the top of the website tiles. Click it to see a list of six news topics - Cars. Entertainment. Lifestyle, Money, News and Sport (see screenshot). Simply select the ones you want, then click Save at the bottom.

Also included in the latest Build is a useful Dark theme which converts Edge's tabs, URL bar, toolbar and settings menu to white text on a black background, which some will find easier to read. To activate it,

Customise Top sites and my news feet O A blank nam

> click the three dots at the top right, Settings, the 'Choose a theme' dropdown menu, then select Dark (see top right of screenshot).

Derek Callaghan

The winner of every Tip of the Fortnight wins this exclusive Computeractive mug!

GOOGLE SHEETS Change the date format in **Google Sheets**

I have always liked to keep track of my monthly expenses, and I've recently started using Google Sheets to do this (it's Google's equivalent of Excel). One thing that annoys me in Sheets is that dates always appear in the default format, regardless of how you type them. For example, you can type July 29 into a cell but it'll change to 7/29/2015 as soon as you move to the next cell. I have now found out how to change this.

Select the cells with date formats you want to change. Click the 123 dropdown menu at the top left, move your cursor to More Formats at the bottom, then click 'More date and time formats'. Next, click the small arrow beside the blue Apply button to see a list of options, including Day, Month, Year, Hours, Seconds and Elapsed Hours. Click to select them in the order you want them to appear. For example, click Day first, then Month, and then Year.

Month without leading zero (8) Custom date and Month with leading zero (08) Month as abbreviation (Aug.) Month as full name (August) Year (36) \$ First letter of the month (A)

You can further customise how you want each option to appear. Click Month, for example, to see its different format options (see screenshot below left), then select the one you want. Repeat this for the Day and Year, then click Apply.

James Watson

FILE STORAGE

Download your original files from Fotofox before it closes

Recently, you featured a brilliant free app called Fotofox in 'Phone and Tablet Tips'. It compresses your original photos and videos and saves them to a secure server, while also retaining lower-resolution versions on your device in order to save space.

The other day I was surprised to receive a notification informing me that Fotofox is shutting down on 31 August. It suggested two ways to download your original files. You can simply open the app, tap each file, then tap Download Full-size at the top right.

However, if you've saved a lot of files this would take ages. Alternatively, open the app and tap the link at the top. You'll see a pre-written email containing a link in your default email app. Send the email to yourself. Now click the link in the email when it arrives and

you'll see a web page with two sections - Photos and Videos. Each contains a link to your zipped files. Click each link to download all photo and video files to vour device.

Ian Thomson

ANTIVIRUS

Stop others changing your antivirus settings

I use Avast Free Antivirus 2015 and thankfully it has a feature that lets me password-protect my settings from my five-year-old son's playful fingers. Open the program, click Settings at the bottom, then scroll down and click the dropdown menu beside Password. Now tick 'Protect Avast with a password'. Type and re-enter a password of your choice, then click OK below. Now anytime you need to change your settings, you'll need to enter your password.

Frank Gannon



Phone and Tablet Tips Brilliant things to do on your device

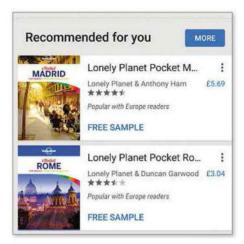
ANDROID

Make recommendations more relevant in Play Books



Google recently updated its Play Books app (www.snipca. com/17346) to provide more

relevant recommendations, based on books you've bought or have indicated an interest in. Open the app to see a list of all the books you've bought (or downloaded for free) as a carousel you can swipe across. Now scroll down to see a list of



recommended titles (see screenshot above). Tap the title to buy and download the book. You can also tap the blue Free Sample option below the title to read the first few chapters.

Now scroll to the bottom and tap the (new) Tell Us What You Like button. You'll see a list of genre buttons, including Romance, History, Biography &

Memoirs and Science Fiction. Tap to select the ones you're interested in, then tap Next at the bottom right. You'll now see a list of titles based on your genre choices. Tap one to add its free sample chapters to your library, then tap Done at the bottom right. After reading the first few chapters, you'll be prompted to buy the book.

ANDROID

Switch your phone to Vibrate-only mode



In earlier versions of Android (prior to 5.0, aka Lollipop), you could tap the Sound option in the notification menu to switch between

Sound, Vibrate and Silent modes. However, if you have updated your device to Android Lollipop, you'll notice that your device no longer has a separate

Vibrate mode. To change the sound profile on your device, you need to press the volume up/down button (on the side of your device). Tapping All/Sound on the right switches your device to volume/ ringer mode, while tapping Silent/None on the left switches it to silent mode.



Switching to Vibrate-only mode is a little trickier.

First tap All/Sound, then drag the volume-level slider all the way to the left (see screenshot below left) until vour device vibrates lightly. It's now switched to Vibrate mode.

ANDROID & iOS

Save Wikipedia pages to read offline



Wikipedia is a treasure trove of information. If vou're interested in a

particular topic then you should save it to read offline. To do that via the Android app (www.snipca.com/17349), tap Search Wikipedia at the top, type your search term, then tap to the select the correct autosuggest option. To save this page to read offline, tap the three dots at the top right, then tap 'Save page' (see screenshot below). To access your saved pages when you're offline, tap the three lines at the top left, then 'Saved pages'.



Best New Apps

What you should install this fortnight

BBC iPlayer Radio

Android: www.snipca.com/17351 iOS: www.snipca.com/17352

As well as a new interface, the latest version of BBC iPlayer Radio now lets you download radio programmes and podcasts to your phone and tablet. This means you can listen to them when you're offline. Downloaded content will remain on your device for 30 days.



Loyalive - Live Loyalty Points

Android: www.snipca.com/17353 iOS: www.snipca.com/17354

This brilliant app lets you store your loyaltycard info for over 70 companies, including



Tesco, Sainsbury's, Starbucks, Costa Coffee, Boots, British Airways and Marriott International, with new firms added every week. You can see your loyalty points/air miles (info is updated regularly) and what you can redeem them for.

Microsoft Hyerlapse Mobile

Android: www.snipca.com/17355

Windows Phone: www.snipca.com/17356 In Issue 454's lead Workshop, we showed you how to create smooth timelapse videos on your device using this brilliant PC program. The Android app (beta) is now available, while the Windows Phone app has been improved and is available for more devices



Saving pages in the iOS app (www. snipca.com/17350) is even easier. Open the app, tap the search icon at the top, type your search term, then tap the correct autosuggest option. To save pages offline, simply tap the heart icon at the bottom of the page. To access your saved pages, tap the 'W' (Wikipedia icon) at the top left, then 'Saved pages'.

WINDOWS PHONE

Change what appears on vour lockscreen

Compared with Android and iOS. Windows Phone provides more options for setting what you see on your lockscreen. By default, you see the time, but you can change this to see weather updates, Facebook updates, the Bing 'image of the day', or even a favourite photo you've taken with your device.

First, swipe down from the top of your screen to access your notification panel, then tap All Settings at the top right. Now scroll down to the 'personalisation' section, then tap 'lock screen'. Tap the box below Background (see screenshot below) to see a list of options. Some app-specific options (such as Facebook) will only appear if you've installed the app from the Windows Store and logged into your account. Select it if you want to see a list of your Facebook updates on the lock screen.

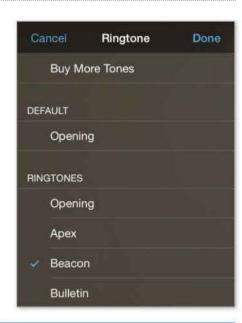
Tap Bing to see the 'Bing image of the day' (the same one that's featured on www.bing.co.uk). Tap Weather to see a summary of the local weather forecast. Tap 'photo' if you want to see a random image. To change the photo, tap 'change photo'. You'll now see two tiles -Camera Roll (photos you've taken) and Backgrounds (a set of stock photos that came with your device). Select the option you want, then tap to select the photo of your choice. Finally, tap the tick at the bottom to set that photo as your lockscreen image.



Add ringtones to your **FaceTime contacts**

You're probably familiar with the default FaceTime ringtone, but did you know you can select a sound for each contact? To do that, open FaceTime and tap the circular 'i' icon beside a contact. Now tap the Ringtone option (which is set to a default called Opening).

Tap any of the options in the Ringtones section below to hear them and tap Done at the top when vou've made your selection (see screenshot right). Tap Buy More Tones at the top if you want to try a selection of paid-for ringtones (cost is between 79p to 99p each).



Games With Kids

What to play together on your phone and tablet

AGES 0-5

Shape the Village

£2.29 www.snipca.com/17357 (iOS)

In this fun game, your toddler will learn how to identify circles, squares, rectangles and triangles. Every character in the village represents one of these shapes. Tap one and they make a sound and move about. There are are 16 activities, including matching the correct shape to its outline.



AGES 6-10

Little Galaxy Family

77p www.snipca.com/17358 (Android) £1.49 www.snipca.com/17359 (iOS) Timing is crucial in this intergalactic, physics-based game. Your child must tap the screen at the right time to navigate from one rotating planet to another, while avoiding the gravitational pull of

the sun and black holes. Collect stars to get better spacesuits and more lives.

AGES 11-16

GeoChallenge - Flags Quiz

Free www.snipca.com/17360 (iOS)

This multiple-choice quiz app is the perfect remedy for boredom. Apart from recognising flags, your kids need to identify capital cities and countries based on their outline. You can choose from short, standard or long quizzes or compete in Survival Mode, where you can only get five answers wrong.







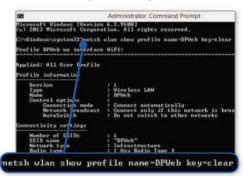
WINDOWS VISTA, 7, 8, 10 See your Wi-Fi password using the Command Prompt



Your PC saves your Wi-Fi password when you first connect it

to a Wi-Fi network. It's easy to retrieve this password if, for example, you want to connect another device to your Wi-Fi network without having to check your router. You first need to open the Command Prompt as Admin. So, press the Start button, type cmd, right-click the 'cmd' (or Command Prompt) option, click 'Run as administrator', then Yes.

Now type netsh wlan show profile name=[name of your Wi-Fi network] key=clear (see screenshot below) into the Command Prompt, then press Enter. You'll now see four sections. Look for the Key Content field in the 'Security settings' section to see your Wi-Fi password.



WINDOWS 8.1 Add professional edits to your photos

Using the Photos app in Windows 8 it's easy to focus on a particular portion of your image while blurring the rest. First, navigate to the image you want to edit, right-click it, move your cursor to 'Open with', then click Photos.

Next, click the image on your screen, click the Edit option at the bottom right,



WINDOWS VISTA, 7, 8, 10

Carry out faster searches on your PC



Searching for a specific file or folder can be a time-

consuming experience because Windows, by default, searches your entire PC. FileSeek is a free program that lets you set specific search criteria and find files in half the time it takes Windows.

Go to www.snipca.com/17328 and click the blue Download Now button. Click the downloaded setup file, Run, Yes, OK, Next, select 'I accept the agreement', then keep clicking Next until you have to click Install. Once it's installed, click Finish to launch the program. You can use features of the paid-for Pro version free for 30 days. To switch to the free version at any time, click Tools at the top left, Settings, then License Key on the left. Now click the

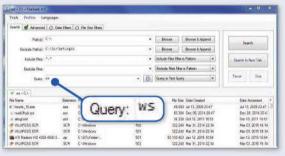
'Change to Free Version' button, Yes, Apply then OK.

To search for a file, type its name in the Query field (see screenshot). Click the Browse button beside Path(s) if you want to narrow down the search to certain locations (drives or folders). You can also exclude locations from the search by clicking the Browse button beside Exclude Path. The Advanced tab lets you set case-sensitive matches and search sub-folders by ticking the relevant boxes.

To search for files created between specific dates and ones in certain size ranges, click the Date Filters tab and the File Size Filters tab and set those values accordingly. Click the Search button at the top right to begin.

FileSeek lists all the results in the section below, including items you've

recently deleted from your PC. Double-click any item to open it using Windows/File Explorer or your default program. Right-click any item to see handy options, including copy, cut, delete, permanently delete or open using another program.



click Effects at the bottom left, then click 'Selective focus' on the right. You'll now see a circle with four dots on your image. The section of the image within the circle will remain clear, while anything outside it will be blurred. Click the circle and drag it to position it where you want, then adjust its shape by clicking and dragging the dots.

Click the Strength option at the bottom left and choose the extent to which you want to blur everything outside the circle. The five options include Maximum, Strong and Medium (see screenshot left). When you're happy with your image, click Apply at the bottom right, then click 'Save a copy' or 'Update original'.

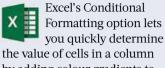
WINDOWS 10

See open items on all virtual desktops on your Taskbar

One of Windows 10's best features – virtual desktops – lets you create multiple workspaces for different sets of files and programs. This is useful, for example, if you want to access your personal content on one desktop and work material on another. By default, the only items you'll see on your Taskbar are those that are open on the desktop you're working on. However, there's a quick tweak that lets you see all open items across all your virtual desktops on your Taskbar.

First, open the Start menu, click Settings, System, then Multi-tasking on the left. You'll see a 'Virtual desktops' section at the bottom right. Here, click the 'On the taskbar, show windows that are open on' dropdown menu and select 'All desktops'.

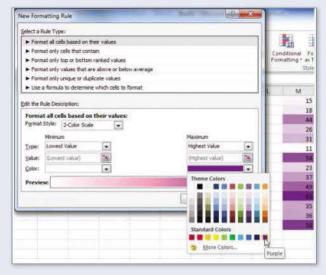
Use colour gradients to represent different values



by adding colour gradients to them. This is especially useful if your column contains a wide range of numbers and you want a quick, at-a-glance view of their relative values.

To do this, select the relevant column of numbers, then open the Conditional Formatting dropdown menu (in the Styles section of the Home tab). Next, move your cursor over the three cell formats (Data Bars, Colour Scales or Icon Sets) to see the

options they contain. As you move your cursor over the options (solid cells, horizontal bars, arrow icons and so on), you'll see how they look if applied to



your column. Click to select the one vou want.

Instead of using the default formats, you can create your own. There are

several different styles you can apply but we'll show you how to add a colour gradient by setting specific colours for the highest and lowest numbered cells in the column (lighter = lower values; darker = higher values).

First select vour column. click the Conditional Formatting dropdown menu, then click New Rule. You'll now see two colour-based dropdown menus at the bottom (see screenshot). Set the Minimum dropdown menu to a lighter colour. Now set the Maximum dropdown menu to a darker

colour, then click OK. You'll now see all the cells coloured according to the colour range you set (see extreme right of screenshot).

OUTLOOK Customise the font used in your Inbox pane

There's an easy way to change the type and size of the font used in vour Inbox pane. First, click the

View tab, then the View Settings option at the top left. Next, click the Other Settings button on the left, then the Row Font button (see screenshot below). You'll now see a Font window from where you can choose a new font, font style and size. Select what you want, then click OK.

If you want to see all your emails in a single list (that is, not seperated according to when they arrived - Today, Yesterday, Last Week and so on), then untick 'Show items in Groups'. To change the lines

seperating each email in your list from the default solid line, click the 'Grid line style' dropdown menu and select from small dots, large dots or dashes. Click OK at the bottom, then OK again to apply your changes.

POWERPOINT

Automate your slideshow presentation



You can move to the next slide in your presentation by clicking the right arrow key on your keyboard.

Alternatively, set a time limit for each slide so that it moves to the next one automatically after that set time.

To do this, click the Slide Show tab, then Rehearse Timings in the Set Up

> sections. Your slideshow will begin playing and you'll see a small timer at the top left. Press the right arrow key to move to the next slide. Each time you do this the timer will reset. At the end of your slide show, you'll see the total amount of time required for your slides, along with a message

prompting you to set the individual slide times as the new default for your presentation. Click No if you want to repeat the process and perfect it. Click Yes when you're sure of the timings.

WORD

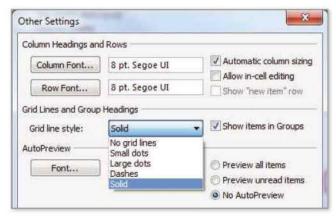
Create new section headings more easily



If you have a large document with lots of sections under various headings, it's easy to jump to a

specific heading using the navigation pane. To see this pane, click the View tab, then tick Navigation Pane at the top. You'll now see a pane on the left listing all your headings. Click one to jump to that section.

To add a heading you need to highlight the relevant text, click the Home tab, then select a heading style from the top right. However, there's a setting within Word that automatically applies heading styles to any text you type in bold. To activate this, click the File tab at the top left, Options at the bottom, Proofing on the left, then click the AutoCorrect Options button. Now click the AutoFormat As You Type tab, then tick the 'Define headings styles based on your formatting' box below. Any text you bold up will now automatically appear as a heading in your document and in the navigation pane.



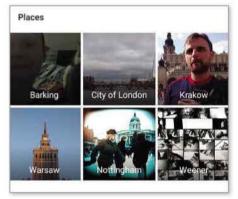
Secret Tips For...

Google Photos

Create timelapse animations, instantly organise your photos and edit Google Drive files virtually

Automatically organise your photos and videos

The Google Photos app (Android www. snipca.com/17308, iOS www.snipca. com/17311) automatically displays all your phone and tablet photos and videos including screenshots, downloads and items received by text - in date order. Tap the search icon (blue magnifying glass) to instantly reorganise them by subject matter. No files are moved around (so it's not quite as impressive as Mary Poppins clicking her fingers to tidy up); they're just displayed in a different order.



Instantly sort all your photos by subject

Add Instagram-style filters

Google Photos is far more than just a rolodex for photos. It's also a great editing tool, with more versatile filters than the overrated Instagram.

Tap any photo, tap the pencil icon and then, tap the mountain-peaks icon. Tap a filter to try it, then use the slider to adjust its intensity - something you can't do in Instagram. To crop and rotate, tap the angles icon. Tap Save to save your edited copy (the original isn't overwritten).

Access Google Drive photos without downloading them

Google Photos lets you access, search and edit your Google Drive photos using your phone and tablet without having to download them to the device as well.

This is very convenient if you've paid for Google Drive storage space (\$1.99/£1.28 per terabyte per month, with 15GB free; www.snipca.com/17310) but don't want all those files clogging up your device.

To see your Drive photos in Google Photos, tap the menu icon (three lines), then Settings, and then the Google Drive slider so it's blue. You can then uninstall

the space-hogging Drive app without losing your files, because they're stored in your Google Drive account.

Create and share albums

There's a whole new world of functions lurking behind the 'Create new' list, which opens when you tap the '+' symbol. Here you can turn your photos and videos into albums, collages and more.



Select photos to automatically create albums, animations and more

The process is similar in each case. For example, tap Album, then tap to select photos and/or videos. Tap Create and wait a moment while the app works behind the scenes ('Preparing files'). When prompted, type an album name and then tap the tick. The album, which you can edit later, is automatically saved in your Collections menu.

To share your album via email or another app, or to copy the link to your clipboard for posting online, tap the Share icon (the dot-to-dot '<').

Make timelapse videos

Our favourite 'Create new' option is Animation. For best timelapse-style results, select a series of photos (up to 50) shot in quick succession, or a series of similar photos. When you play back your animation, it will play in a looping video.

We found that our video wouldn't play when we tried sharing it directly in messaging apps. So we copied the link and pasted it into the message instead, and it worked a treat. The animation automatically played in the recipient's browser on PC, phone and tablet.

Hack Google Photos to recognise faces

Google Photos can't seem to work with children and animals. Well, mainly animals. Its automatic sorting algorithm got off to a mortifying start when it categorised photos of black people as 'Gorillas' (see News, Issue 454). In Japan, a Twitter user's father was deemed to be a 'Horse' (www.snipca.com/17298) - but at least it got him retweeted 25,000 times. Closer to home, Google Photos thinks my cats are dogs.

We don't know how good it is at identifying individual people, because that function isn't available outside the US - probably for the best. But if you're brave enough to give this function a try,



fool the app into thinking you're in the US by using a free VPN app like Hotspot Shield (Android www. snipca.com/17326, iOS www.snipca. com/17327 - see screenshot). Find out more at www.snipca.com/17325.

What's All the Fuss About...



Moneypenny

It may not flirt with you, but this virtual secretary could prove useful in other ways

What is it?

Yet another virtual personal assistant, following in the wake of Microsoft's Cortana, Apple's Siri and Google Now. This one is being developed by Facebook, one of the few tech giants that has vet to launch such a tool. According to reports, it will be built into the Facebook Messenger app (iOS www.snipca. com/17299; Android www.snipca. com/17300).

What's Facebook Messenger?

It's an instant-messaging service available as an app and through Facebook. Since April you've been able to use it on its own website (www.messenger.com) without having to sign into Facebook. The company has big plans for Messenger, developing it as a multitasking app that becomes part of your everyday life. To this end it has recently added games and video calling, and the ability to send and receive money. Shops can also use Messenger to send delivery updates to customers.

So how does Moneypenny work?

Differently to Cortana, Siri and Google Now. Those are automated tools that respond to your spoken questions using artificial-intelligence software. In contrast, Moneypenny will connect you to a real person – probably experts in a particular field. So while you may ask Cortana factual questions like 'what's the capital of Burkina Faso?'*, you'll probably ask Moneypenny's experts to carry out a service for you.



Soon you may be able to order goods and services through Facebook Messenger



Such as?

Well, you could ask them to track down an obscure book or record. Or maybe find a part for your car that no local garage can supply. Perhaps travel agents and mortgage brokers will offer their services through it, saving you the hassle of shopping around. Its potential reminds us of the famous advert from the Eighties, in which JR Hartley looked everywhere to find the book Fly Fishing, before locating it through the Yellow Pages (watch it again at www.snipca.com/17324). In the digital age, perhaps JR Hartley would use Moneypenny.

If this is how Moneypenny would work then it will rival so-called 'digital concierge' services such as Magic (https:// getmagicnow.com), Operator (https:// operator.com) and GoButler (www. gobutlernow.com). These offer 24-hour assistance, but only by text message.

So would I actually talk to a real person using Moneypenny?

We're not sure. If it's text only, it would feel like just another service. To make it stand out, Facebook may give you the option to speak to a person, just like Amazon does with its Mayday help

service (www.snipca.com/17342).

Will it be free?

You've asked the most important question. But we don't have an answer. If it does use real people, they will need to be paid. However, Facebook would be keen to offer it for free. So our guess is that Facebook would make money by taking a cut from anything you buy when you use the service.

Does it have anything to do with James Bond?

Afraid not. Moneypenny appears to be only the codename, and Facebook probably won't have the legal right to use it. The company cleverly chose a working title that would generate amusing headlines and give magazines an excuse to use photos of old Bond films (and naturally we couldn't resist!)

When will it launch?

Nobody knows. Facebook's employees are testing it now. We hope they are using this opportunity to try their best 'hello Mish Moneypenny' Sean Connery accent. That's what we would do, anyway.

*Ouagadougou

What's (secretly) KILLING YOUR PC?

Hidden processes are making your PC slow, unstable and unsafe. Jane Hoskyn reveals how to fix the 10 worst offenders - and none of them are malware!

hat on Earth is your PC up to this time? There you were, happily writing an email and touring Spain in Google Earth, when your computer had another one of its funny turns. Your mouse cursor got stuck, the little spinning circle went haywire, and then the screen turned blue. Or maybe everything just ground to a halt again.

WHAT YOU CAN DO

- Fix drivers that drive your PC mad
- Remove pointless startup files and update managers
- Clear out Microsoft junk
- Stop PUPs and adware coming back
- Update software you need and uninstall programs you don't

When things like this happen, it's easy to blame malware or even ransomware. And yes, it's good practice to run an antivirus scan whenever your PC goes bump in the night, and remembering to keep your antivirus up to date and properly configured. If you need a recommendation, Kaspersky Internet Security 2015 consistently wins our rigorous lab tests (www.snipca.com/17394; see our Reader Offer on page 68).

However, this isn't a feature about malware, and you'd be wrong to assume that malware is responsible for all your PC's funny turns.

So if it isn't malware...?

Malware's ego is its fatal flaw. Malicious hacking is basically vandalism, so it loves to make its presence felt, which makes it easier for you and your antivirus to detect it and deal with it. It's destructive but often avoidable.

The stuff that's really killing your PC is quieter, gentler and much harder to pinpoint. It generally has good intentions, too. Drivers and startup programs, for example, don't mean to annoy the heck out of you or send your PC to an early grave, but that's what they're doing, especially when there are lots of them. Then there's the system-tray junk that comes bundled with software and lives like a parasite on your hard drive, eating memory and slowly extinguishing your computer.

In this feature, we'll highlight your PC's 10 most likely stealth assassins and reveal the best free tools – some new programs, some long-standing favourites – for finding, fixing, stopping and removing them for good.



FIX THE FILES THAT ARE KILLING YOUR PC

1 CORRUPT DRIVERS

Why bad drivers cause crashes

Bad drivers are just as much of a menace on your computer as they are on the road – but at least on the road they're easy to see. Old and corrupt drivers are tiny files buried deep inside your PC, and they can wreak destruction for years before you figure out what's going wrong.



Windows Device Manager lists all your PC's installed hardware

Drivers tell your hardware what to do. Every piece of hardware inside your PC or plugged into it – from motherboard to mouse – needs a driver to "drive" it. You can see all your installed hardware in Windows Device Manager (see screenshot left). To open it, type device manager into Start and press Enter.

Despite their modest size and uncomplicated role, drivers are notably accident-prone. They go mysteriously missing, fail to update, get left behind when hardware is uninstalled and – as with other file types – get corrupted.

The resulting problems can easily be mistaken for signs of a malware infection. Bad drivers mainly cause unexplained crashes and malfunctioning hardware, which ultimately means a malfunctioning PC.

Fix drivers using built-in tools

When your PC and its components start behaving badly, the Device Manager is your first port of call. At first glance, all you see is a list of hardware categories ('Storage volumes', 'Mice and other pointing devices' and so on). Work through the list, clicking each dropdown arrow to see all installed devices in that category. Click 'Show hidden devices' in the View menu for important system hardware.



Check, delete and update troublesome drivers using Windows Device Manager

Look for the device (or devices) you're having trouble with, then right-click it and click Update Driver Software. Some drivers can also be disabled or uninstalled via the right-click menu.

If a device is marked with a yellow exclamation mark in Device Manager, its driver is corrupted or not installed properly. Delete the device in the list, restart your PC and let Windows re-detect the device. You may then have to reinstall the driver from the manufacturer's website. Use the Properties option in Device Manager to jot down details, such as the driver's full name and version (see screenshot above).

Create a system restore point before making any changes to device drivers, whether they're hidden or not. It's a good habit to get into before making any system-level changes to your PC.

Weed out Blue Screen drivers

NirSoft's free, fast, portable tool BlueScreenView (www.snipca.com/ 17390) is designed to diagnose the infamous 'Blue Screen of Death' – the screen you see when your operating system (OS) has suffered a fatal error (Windows 8's blue screen includes a "sad



Use BlueScreenView to discover what driver caused your Blue Screen of Death

DRIVER TOOLS TO AVOID

There are plenty of third-party driver-management tools on the market, but their installers tend to be stuffed with PUPs (junk, in other words), and these are the last things you need if you want to improve your PC's health.

IObit Driver Booster 2 (www.snipca. com/17395) is popular and works in all versions of Windows since 2000, but it angered us from the moment its Download button redirected us to the download mirror site Cnet, whose installers are notorious for PUPs. Sure enough, there were unwanted extras in the Driver Booster installer. You can opt out, but we'd rather avoid the risk of adware.

Free new program DriverMax (www.



snipca.com/17393) sounded like a refreshing alternative, with an option to export all your current drivers (or just the ones that work properly) to a folder or a ZIP file for reinstalling later – for example, when

upgrading to Windows 10. But its installer is a horror show. First it slaps you with the adware Wajam (see 'Named & Shamed', Issue 454) and then it tries to sneak in the safe, but uninvited, browser Opera.

Adware is there to make money for the developers of free software, and we understand that's just business. But the line between adware and malware is blurred, which makes all adware risky – and even "safe" adware can harm your PC's wellbeing, as we'll see on page 55. face" emoticon, as if to rub salt into the wounds). The diagnosis usually involves a dodgy driver, so this safe tool is brilliant for weeding out misbehaving driver files.

When you run BlueScreenView it lists all the DMP (memory dump) files saved by Windows during blue-screen crashes, along with the exact error message that appeared. You can then run the message through Google to find out which driver was the culprit and how best to fix it.

If one particular driver keeps coming under suspicion (graphics card drivers are common culprits), it probably means that driver is faulty, corrupted or even missing. Its associated hardware may even be damaged. Update the driver using Device Manager, and if that doesn't work, you should consider a hardware upgrade.

2 SYSTEM-TRAY **HOGS**

Why system-tray icons are a problem

At the extreme right of your Taskbar you'll see a collection of system-tray icons. Some of these icons may be hidden in a pop-up box that appears when you click a little arrow; you can move any system-tray icon to the box by dragging it into the space above the Taskbar (see screenshot below).

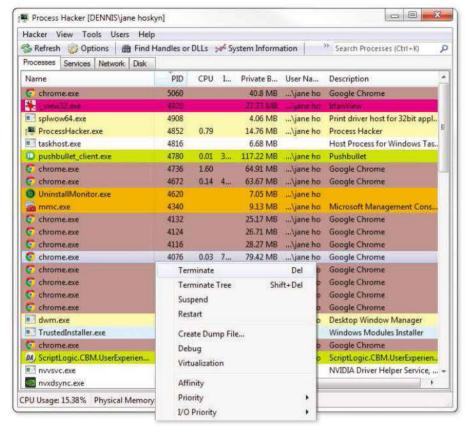
Every icon represents a running program, and each program may be responsible for a number of running processes, so the system tray is an important clue to the secret processes grinding away inside your PC.

Some of the icons are important and reassuring. Your antivirus should have an icon in there, for example. Right-click it for options (Settings, Pause and so on), and left-click it to open its program window.

Other system-tray icons, however, are just parasites. They represent running processes that are leeching your PC's resources without your knowledge. They



Drag system-tray icons from the Taskbar to a pop-up box - and vice versa



Find and stop system-tray hogs using the brilliant, free Process Hacker

can appear and disappear from the system tray willy-nilly, like flies at a barbecue, and some are as hard to identify as insects because they provide little or no information about their associated program.

Find and kill system-tray hogs

You kill processes using the Task Manager, right? Indeed you can, and on page 70 we offer six Fast Fixes for making Microsoft's tool easier to use. But even at its smoothest, Task Manager is a blunt instrument. It assumes a certain level of knowledge about running processes that most of us just don't have. It's great if you know what process you want to stop, but the thing about unidentified hogs is that you don't know what they are.

Our favourite Task Manager alternative is the free, open-source program Process Hacker (http://processhacker.sourceforge. net). Its installable version is PUP-free with no hidden charges, and there's also a portable version (www.snipca.com/ 17399) that you can store on a USB stick and run on any computer (XP and later).

Unlike Task Manager, Process Hacker lists all processes next to the program that triggered them, along with their system-tray icons. Items are organised in a 'tree' format, so you can click a program to open a list of its processes, then click it again to close it up. This is especially

useful if you use Chrome and programs by Adobe, whose processes are scattered throughout Task Manager with no rhyme or reason.

Right-click any item for options (see screenshot above), including Terminate, Terminate Tree (end the process and all its sub-processes) and Create Dump File (dumps the process's current memory load).

To get even more out of Process Hacker, click 'Choose columns' and decide which extra columns to add. Columns like Start Time and Virtual Size can help give an even better insight into what's throttling your PC.

Also look at Process Lasso (www. snipca.com/17400), which lets you create rules to prevent certain processes running under certain conditions. AnVir Task Manager (www.snipca. com/17391) is also worth a look, but it tried to smuggle something called Reg Organizer on to our PC and fill our Desktop with shortcuts. All shortcuts are processes, and every extra process chips away a little bit of your PC's life force.

Definitely avoid the free tool System Tray Cleaner (www.snipca.com/17392). Its installer insists on sticking Wajam on your hard drive, and that's too high a price to pay. We're supposed to be saving your PC's life here, not finishing it off.

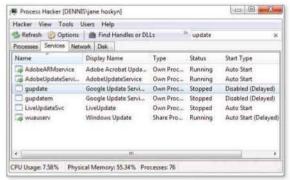


3 UPDATE SCHEDULERS

Why you don't need update schedulers

Many of your PC's background-running processes have honourable intentions, such as keeping your software and plug-ins up-to-date. Software updates are vital for your security (we devoted a whole Cover Feature to their importance in Issue 432), but that doesn't mean you need update monitors running constantly in the background.

Take 'Jusched.exe' (Java Update Scheduler), for example. It runs constantly while your PC is switched on – but it only checks for updates once a month. Is that really a sensible use of resources?



Search Process Hacker for background-running update processes and services



using Ninite no backgroundrunning update managers needed

Know which update tools to keep

Some update monitors are vital. Others just hang around chomping resources like slugs in your garden. To weed out these destructive little pests, open Process Hacker, type update in the search

> box and press Enter. Then on the Processes and Services tabs, you'll see all your installed update monitors and schedulers.

Right-click an update item in Process Hacker and click Copy Name or Copy Display Name. Then go to the free online tool Startup Programs Database (www.snipca.com/17401) and paste the process name into the search box. The Database will then deliver a detailed verdict

on whether the process is worth keeping or stamping out.

The answer isn't always a straight yes or no. For example 'AdobeARM.exe' (Adobe Reader and Acrobat Manager) is "a valid program", but takes up "unnecessary resources", so you're advised to disable it and check for updates manually instead. Similarly 'DivXUpdate.exe' needn't run constantly, because it automatically updates anyway when you open any DivX program. The Java Scheduler 'Jusched.exe' deserves the boot completely - as does Java, which we'll come to on page 56.

Disable and delete unnecessary updaters using Process Hacker, then use the superb free online tool Ninite (https://ninite.com) to update just the programs and plug-ins that need updating.

FIX MICROSOFT JUNK THAT'S KILLING YOUR PC

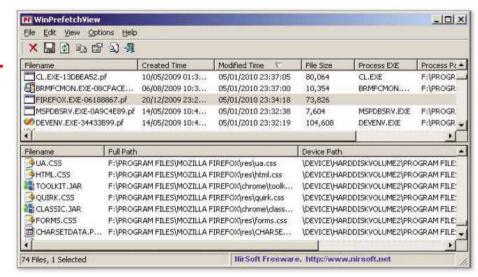
4 PREFETCH PROCESSES

Why Prefetch kills PCs

More to the point, what is Prefetch? Throwing a ball for a dog? Sadly not. Windows Prefetch is supposed to speed up startup by caching files for every program you use - up to 1,024 files maximum. That's a lot.

Caches initially make programs and web pages load faster, but an over-sized cache has the opposite effect by clogging your hard drive and over-working your processor.

Trivia corner: in Vista Prefetch was renamed SuperFetch, and in Windows 7 it was renamed ReadyBoost (though the cache folders are still called Prefetch). The best of those names, clearly, is SuperFetch. Bring back SuperFetch!



Clear out pointless Prefetch data using NirSoft tool WinPrefetchView

Make Prefetch worthwhile

NirSoft comes to the rescue again with its free, portable tool WinPrefetchView (www.snipca.com/17402). Run it on any computer from XP to 10 to see its Prefetch folders, check which caches need to load when you start your PC, and then delete the rest.



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Nephron8 ★★★★★

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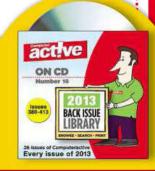
Allan Feeney ★★★★☆

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5 MICROSOFT SETTINGS

'MS' doesn't mean 'OK'

Never assume that just because a process is made by Microsoft it's important. Sure, many Microsoft items are vital building blocks of your OS, but some do more harm than good.

For example, the Windows Messenger instant-messaging file 'Msmsgs.exe' has been in your default startup list since XP, but will you ever use it? Not likely, and it's devouring memory behind vour back.

Stop Microsoft killing your PC

To get rid of pointless Microsoft junk, look no further than CCleaner (www.piriform. com/ccleaner), one of our favourite free programs ever. Free plug-in CCEnhancer (www.snipca.com/17403) adds even more power by automatically integrating with CCleaner to expand its cleaning list.

Run CCleaner and look through the Windows tab for pointless tat. CCleaner ticks dozens of boxes by default, but go ahead and tick more once you're sure they can be removed safely.

But don't be too gung-ho. As mentioned, some Microsoft processes are important. Check the database Pacs Portal (www. snipca.com/17377) for an informed verdict.



Remove pointless Prefetch caches and other Microsoft junk using CCleaner

FIX SOFTWARE THAT'S KILLING YOUR PC

6 BUILT-IN BLOATWARE

Pre-installed programs kill PCs at birth

Even a brand new PC is slower and less stable than it could be, thanks to the commercial bloatware installed by its manufacturer.

This rubbish eats up hard-drive space before your PC even leaves the shop. It feels like fraud. You pay for a 1TB hard drive and only get 700GB of usable space (you've probably noticed similar problems with new tablets and phones). Then, of course, the bloatware starts wasting processor power when you switch it on.

Pre-installed junk can even be dangerous. The Superfish adware bundled in Lenovo laptops earlier this year was actually spyware (see Named & Shamed, Issue 444). Lenovo was forced to create a Superfish Removal Tool (www.snipca. com/17410) and the business faces a struggle to win back customers' loyalty.

Decrapify your PC

Free tool PC Decrapifier (www.snipca. com/17405) is designed to ditch junk that comes pre-installed on PCs and laptops. It works on older PCs too, though - and if your PC isn't new, it'll invite you to create a system restore point before wiping out any software.

Our antivirus (Kaspersky) didn't seem fond of Decrapifier, which may be testament to Decrapifier's power. We can confirm the tool is safe, so tell your antivirus to 'trust' it when prompted.

Run Decrapifier, click Analyze and wait for the lists to populate. Innocuous programs appear under Everything Else; dodgy programs appear under **Questionable or Recommended** (recommended to remove, that is). Tick what you want to ditch and click Remove Selected. They'll be uninstalled in one go.



PC Decrapifier lets you remove pre-installed software and plug-ins

7 PUPS AND ADWARE

Why PUPs are not cute

To clarify: puppies are cute. PUPs ('potentially unwanted programs' far too polite a phrase) are vicious, selfish PC-killers. Some are obvious, such as toolbars and search engines that hitch a lift into the browser when you're installing free software. Others are silent, hidden destroyers - and if you find and kill them, they regenerate. They are the stuff of nightmares.

They don't quite qualify as malware because they don't steal or spy on you. But make no mistake, they're hideous. They leech processor power, prevent other programs working properly and can be extremely intimidating.

Kill PUPs for good

Adware and PUPs are masters of disguise and regeneration. We'd call them "superheroes" if they weren't so rubbish.

So even if you think there's nothing untoward on your PC, regularly check it for hidden villains using AdwCleaner (www.snipca.com/13532), another of our favourite free programs. Download the portable program file, right-click it and select 'Run as administrator'. Click Scan and then wait a few seconds while it checks your PC and Registry for dodgy files.

When the message 'Waiting for action' appears, click through the tabs (Services, Folders, Files and so on) to see all your PC's hidden adware. You may be shocked by how much is in there - including stuff you've never noticed or heard of. Click Cleaning to get rid of the junk, but make sure you've saved any work first -AdwCleaner will automatically close all your running programs and restart your PC. When it restarts, you'll get a text log of hidden villains and where they were found. Save it for future reference.

Some adware is tricky to avoid even when you're vigilant, because opt-out buttons can be hidden very cleverly. So it's worth adding the free tool Unchecky (http://unchecky.com), which automatically opts you out of any PUPs in software installers. Like us it's not completely foolproof, but it's a worthy addition to your anti-adware arsenal.



8 FLASH **AND JAVA**

Why plug-ins are pointless

Plug-ins are amazingly easy for hackers to attack. That's why Flash and Java are continually being patched - requiring yet more tedious updates on your part.

What's more, they're serious memory hogs. So as well as making your PC unsafe, they're also making your PC slow. Are they worth it?

Kill vour plua-ins

We're fond of our CCEnhancer plug-in for CCleaner (see page 55), but other plug-ins can take a running jump.

Video websites including YouTube and Netflix are gradually switching from Flash to the safer HTML5 (which isn't a plug-in) for video support (find out more at www.snipca.com/17412). If you do want to use Flash, set it as click-to-play in your browser settings.

As for Java, ditch it completely. Its occasional usefulness is far outweighed by malware risks, constant updates and the amount of space and memory it consumes.

9 STARTUP IUNK

Why startup programs are destroying your PC

Startup processes are meant to bring your PC to life, not kill it. If too many are set to run automatically when Windows starts, your PC's speed will suffer.

Even great programs such as CCleaner add themselves to your PC's startup list without asking you first. It's not for your benefit, either. CCleaner only runs in the background so it can pester you with pop-ups reminding you that your PC needs cleaning which you know anyway.



Investigate and remove startup items in Autoruns

Get rid of startup pests

Our favourite tool for removing startup junk is Autoruns (www.snipca. com/17380), which is free, portable and very easy to use.

Run it as administrator and wait a moment while the list populates, then untick any items you don't want to run at startup (which is to say, any items you don't want running in the background the whole time you've got your computer switched on).

The list will run to dozens. If it's too long to read easily, go to the options menu and click Hide Microsoft Entries. Now you'll only see third-party startup processes. Click Hide VirtusTotal Clean Entries to only see items that malware database VirusTotal has deemed dodgy.

To speed up your PC and make its processor work less hard, untick any item you don't need running constantly in the background. Leave your antivirus ticked, but you can safely untick CCleaner - run it manually when it suits you.

If you're not sure what a process is or does, right-click it in Autoruns and click 'Jump to Image' to see it in Windows Explorer. Right-click the file, select Copy and then paste it into the search box at Pacs Portal (see page 55) for more information and a safety verdict.

If Pacs Portal recommends removing the item completely, uninstall it and follow up with AdwCleaner.

10 OLD SOFTWARE

Why old software is killing your PC

Nobody ever gets round to uninstalling all the software they no longer want, and even fewer get round to updating all the software they do want. That may be understandable, but it's a problem - because old and outdated software is killing your PC. It clogs hard-drive space, runs processes that are long-redundant, hijacks vour file

associations and just gets in the way. And if you miss vital security patches, it could make your PC dangerous.

Update software automatically

First batch-remove all the programs you no longer need, using Geek Uninstaller (www.geekuninstaller.com/download; click Download Free). Then run AdwCleaner and CCleaner to sweep up any leftovers.

Next, get those updates. To do it manually, use Ninite (see page 53). To keep your software updated automatically, use the free Personal Software Inspector (PSI) from security firm Secunia (www.snipca.com/17415). You have to create a free account before you can download the tool, but as long as you untick the 'Yes. I would like to receive...' box you won't be battered with spam.

Download and run PSI, click 'Scan now' and wait while it scans your installed software and calculates your System Score.

Our score was 95 per cent, which doesn't sound too bad, but that missing five per cent still represents a big un-patched hole that hackers can exploit. You can then update out-of-date tools from the same window. To switch to automatic updates, click Settings at the bottom of the program window, 'Update handling' and then tick Update.

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most useful Command **Prompt commands**

This issue, Jane Hoskyn reveals 10 ways to organise files and folders using your PC's powerful hidden tool



11 Command your Desktop

The Command Prompt's default location is C:\Users\your name, so any commands you type apply to that directory only. To work in a different directory, you need to move the prompt to that directory.

For example, if you want to use the Command Prompt to organise files and folders on your Desktop, move the prompt to the Desktop by typing cd ('change directory'), followed by a space, followed by desktop. When you press Enter, the prompt should be at C:\Users\ your name\Desktop.

12 Create a folder

The command 'md' stands for 'make directory' and creates a new directory (folder) in the prompt's current location your Desktop, for example.

Type md followed by a space, type a name for your new folder and then press Enter. If the name is more than one word. put it in quote marks. For example, to create a folder called 'new folder', type md "new folder".

When you press Enter, nothing will happen in the Command Prompt. You'll just get a new prompt. You can either go to the Desktop (or wherever you placed it) to check the folder has been created, or type dir and press Enter to see a list of folders contained in the current directory - including your new folder, along with the date and time you

OPEN CMD PROMPT

To open the Command Prompt in any version of Windows, type cmd into Start and press Enter. Type a command at the 'prompt' ('>') and then press Enter to carry out your chosen task. Most commands are case-insensitive, so you can type in upper- or lower-case (or a mixture of both) and get the same result.

created it (see screenshot right).

13 Delete a folder

You can use the 'rd' ('remove directory') command to get rid of a folder. Try it out on your newly created Desktop folder. With the prompt on the Desktop, type rd, then space, then the name of the folder vou created, and then press Enter to delete the folder entirely.

14 Delete a file

This time the command is what

you'd expect - 'del'. To instantly delete a file called 'ca.txt', for example, type del ca.txt and press Enter. Again, you can only apply the command to the directory you're in, so move the prompt to the relevant location first.

15 Move a file

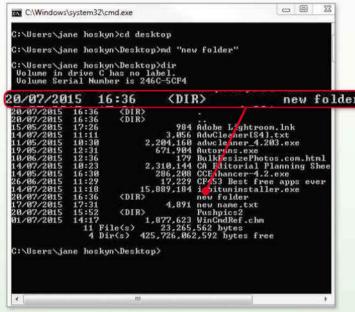
The 'move' command is simplest if you're moving a file from the current directory to a folder in the same directory. For example, to move the 'ca.txt' file from your Desktop to a folder on your Desktop called 'myfiles', start with the prompt at C:\Users\your name\Desktop, type move ca.txt myfiles, then press Enter.

16 Copy a file

As above, but type copy instead of move.

17 Move or copy to a different directory

To move or copy a file to a folder in a different directory, use the 'move' or 'copy' command as above but type the full path of the destination folder.



Use the Command Prompt to create a new Desktop folder - and then check that it's there

18 Rename a file

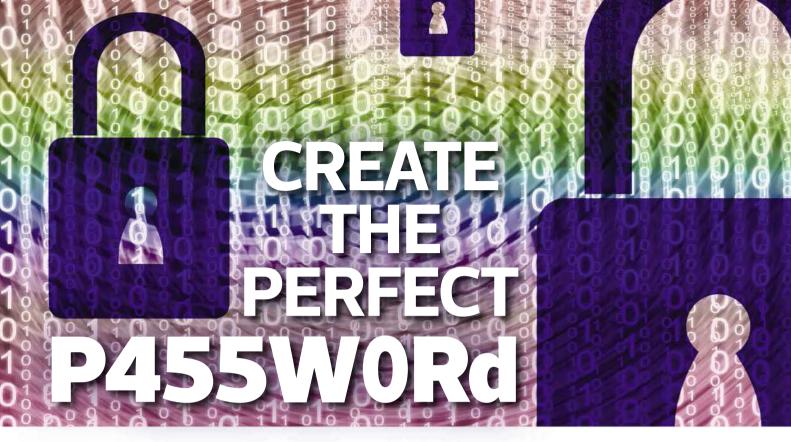
Move the prompt to the directory containing the file, then type rename, then space, then the file name (with extension) in quote marks, then space, then the new name, and then press Enter. For example, rename "ca.txt" "new name.txt".

19 Label a folder

Use the 'label' command to rename an entire directory. For example, label e:Photo. We recommend saving this command for partitions and external drives rather than your C: drive.

20 Organise multiple files

The asterisk (*) is a wildcard command that lets you apply an instruction to lots of files or folders at the same time. For example, to delete all text files in the current directory, type del *.txt and then press Enter. There's no warning ('Are you sure you want to delete ...?') so use the wildcard and the 'del' command together with extreme caution!



Remembering passwords is hard, but hacking them is easy – unless you create one that's unforgettable and unhackable. **Kat Orphanides** shows you how

oming up with umpteen different passwords for your various accounts and devices is a major challenge. What's more, hackers are using more and more sophisticated methods to crack passwords, and that makes it increasingly difficult to come up with passwords that'll keep them out.

Here, we'll explain why seemingly good passwords and pass-phrases are putty in hackers' hands, and then show you the latest clever tricks for quickly creating passwords that no one will crack and you'll never forget.

Why your password isn't secure

Many of us plump for passwords that link a couple of unrelated words and a number (such as the one in our screenshot below). They're easy to remember and you'd think they'd be hard to guess – but actually they're scarily easy to crack.

Sign in	
Microsoft account What's this?	
@gmail.com	
aspicbadger67	
Keep me signed in	
Sign in	
sign in	

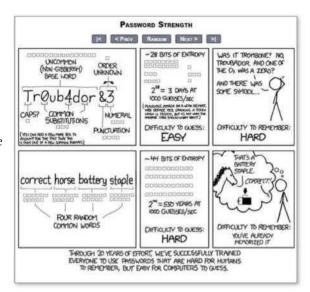
A couple of unrelated words in combination with a number are easy to remember, but they're also a doddle to crack

Your average password often fulfils the bare minimum requirements set by the account they're trying to protect. This usually means eight characters, probably including a number and/or a capital letter.

Naturally, you'll try to create a password you can easily remember, and which isn't too much of a pain to type. But even if you've combined a couple of uncommon words and added one or two random characters, your password will not be very secure.

Password researchers have found that people tend to use certain predictable patterns, and the latest cracking tools exploit this. These tools even try out common 'keyboard walk' passwords such as 'qweasd' – key sequences that are easy to type and don't constitute a dictionary word.

Even if the password is "only" for your PC's Windows login, remember that this password is also tied to your Microsoft online account and all the tools it links to. Likewise, your phone and tablet passwords are connected to your Google or Apple account – and all these online accounts may be linked to your credit or debit card.



Online comic XKCD's pass-phrase ideas are less effective than they are entertaining

Why your pass-phrase may not keep you safe, either

In theory, longer passwords and passphrases are harder to crack. Every extra character effectively doubles the number of guesses needed to break it. However, that only applies if your pass-phrase is truly random.

Criminals are increasingly savvy to the practice of using phrases as passwords. Cracking dictionaries, such as CrackStation (www.snipca.com/17315), list all passwords they've managed to harvest from the internet – which now include quotes from literary sources such as The



Bible and the works of Charles Dickens. This is particularly helpful for hackers who use 'combinator attacks', whereby they try breaking into accounts using strings of words rather than just letters.

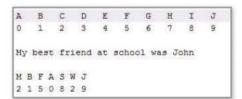
The online comic strip XKCD (http:// xkcd.com; see screenshot below left) suggested combining random words in nonsense phrases (the 'correct horse battery staple' technique, https://xkcd. com/936). Lovely idea, but experts insist this won't make the pass-phrase any less vulnerable, especially from hackers using combinatory attacks.

Turn a phrase into a password

Our favourite method is to use a phrase to create a seemingly random password. This strategy, advocated by Harvard research fellow Bruce Shneier and described on his blog (www.snipca.com/ 17316), means your phrase becomes a mnemonic for your password.

For example, 'When I was 16 I went to see Engelbert Humperdinck' could become 'WIw16, IwtsEH'. It's strong, memorable (assuming you actually did see Hump when you were 16) and impossible to crack using a dictionarybased attack.

You can even use this technique along with a simple substitution cypher (code pattern) to create secure numeric keys. For example, 'My best friend at school



Use a cryptic cypher pattern to change phrases to number-strings

was John' becomes 'mbfaswj', which can be mapped against the numbers 0 to 9 to give you '2150829' (see screenshot below left). This helps you avoid the obvious patterns people tend to pick when asked to come up with a numeric code. Be careful, though: never use your original phrase as a password reminder.

Use free tools to generate random passwords

Long, truly random passwords are the gold standard. Random password generators are built into most password managers, including LastPass (https:// lastpass.com) and Dashlane (https:// www.dashlane.com, see screenshot right), as well as offline tools such as KeePass (http://keepass.info).

There are also online password generators, such as the Secure Password Generator (http://passwordsgenerator. net) and Random.org (https://www. random.org/passwords). If you're up for a challenge, try the dice-based password-generation methods explained on the Diceware Passphrase site (www. snipca.com/17318).

But even random passwords should be long. The hardware used by hackers is more powerful than ever, so an entirely random eight-character password can be broken by brute force in less than an hour (www.snipca.com/17319). So make sure all your passwords are at least 12 characters, and use a combination of numbers, upper- and lower-case letters and special characters (such as £ and ^).

Password managers, incidentally, are well worth using for storing and remembering your passwords for you, as well as generating them in the first place. All you have to remember one master



Randomly generated passwords are the most secure option

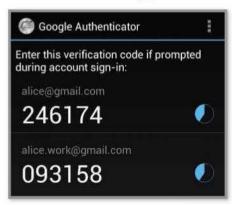
password, which is only stored in your brain. So make it memorable!

Double-lock your accounts using two-factor authentication

Two-factor authentication (TFA) adds an extra layer of security to your logins by requiring not only your password, but also a secret code that'll be sent to you by text message, email, app or even using a special hardware token such as those used by many high-street banks.

Many password managers support TFA, so even if someone gets hold of your master password, they won't be able to log into your accounts. Support is also built into Google, Facebook, Dropbox and Twitter, among many other popular online services. To generate TFA codes and add support to accounts that don't have TFA built in, use the free app Google Authenticator (Android www.snipca. com/17322, iOS www.snipca.com/17323).

Bear in mind that losing your authentication device - your mobile phone, for example - can lock you out of your accounts, so remember to set a backup contact number. [23]



Google Authenticator generates codes for using in addition to your password

DON'T USE THESE PASSWORDS!

We all know to avoid easy-to-crack passwords like 'pa55word' and 'iloveyou', but you may not have realised how easy it is to hack the following examples...

Monkey: The most popular animal password by a long shot, this one crops up year after year for no apparent reason. 'Dragon' is the most popular fantasy creature.

Mumof3g8kids: It might look secure, but this is just a really common phrase ('Mum of three great kids') rendered in "text speak". It's actually so common and easy to hack that it's been used by

researchers in password education. Itwasthebestoftimesitwastheworstof times: Popular literary quotes like this are being added to cracking dictionaries and are easily hacked in combinator attacks. Philippians4:13: See above. Hackers love The Bible - it's one of their favourite source texts.

Ph'nglui mglw'nafh Cthulhu R'lyeh wgah'nagl fhtagn1: What? This is a fictional occult phrase from the H.P. Lovecraft novel Call of Cthulhu (www. snipca.com/17321), which is also a film and can be read in full for free online. Very easy to hack.

Fix problems Microsoft won't

Still can't get your Desktop shortcuts to work? You're not alone. Barry Collins shows you how to solve problems Microsoft abandoned

ith Windows 10 now the centre of attention, there's one thing you can guarantee: Microsoft simply won't be bothering to deliver anything but security updates for its predecessors, including Windows 7 and 8.1. In fact, it's already withdrawn mainstream support for Windows 7 and earlier versions, and for pre-2010 versions of Office. Windows 10 is Microsoft's sole focus now.

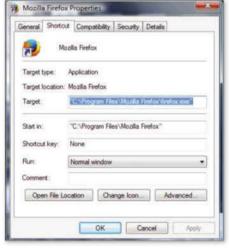
Here, we look at six common problems that Microsoft has left you to work out for vourself, and show you how to resolve them. Microsoft may have effectively abandoned the tools involved, but there's no reason why you should have to give up on them too.

Fix broken Desktop icons

Desktop icons suddenly not behaving as they should is a problem that's particularly prevalent in Windows XP, but it's not uncommon in Windows 7 and 8/8.1. Microsoft has never got around to fixing this irritation.

If the broken icon is a program shortcut (distinguished by a small arrow), Windows has probably lost track of the software the shortcut is supposed to open. You can help by right-clicking the icon, selecting Properties and typing the path to the program's EXE file (within quotation marks) in the Target field.

By default, the path is C:\Program Files\ProgramName\ProgramName.exe. Find out the precise path by opening Windows Explorer (or File Explorer in Windows 8/8.1/10) and clicking or double-clicking 'Local Disk (C:)', then



Type the correct EXE file path to make a program shortcut work again

Program Files and so on. For example, in the Target field for the Firefox icon on our PC we'd type "C:\Program Files\ Mozilla Firefox\firefox.exe" (see screenshot above).

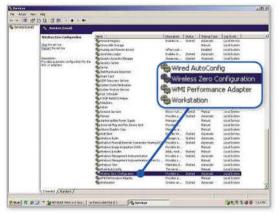
If the icon represents a file, such as a Word document or photo, that won't open, Windows has probably forgotten which program it's meant to open the file with. Right-click the file icon, select 'Open with...' and choose the program you want to use.

Make Wi-Fi work in XP

It's hard to imagine life without Wi-Fi now, but when Windows XP was first launched in 2001 it didn't even support wireless internet. Support was eventually forthcoming, but it was never

particularly stable, and you can still be plagued by the error message 'Windows cannot configure this wireless connection' when attempting to set up a Wi-Fi connection in XP - and sometimes in later Windows versions as well. To work around this, you need to jump-start the Wireless Zero Configuration setting.

Click Start, right-click My Computer and select Manage. In the window that appears, double-click 'Services and Applications', then double-click Services. Scroll down until vou see Wireless Zero Configuration (or WLAN AutoConfig in Windows 7 and later) and double-click that. In the window that now pops up, choose Automatic from the list next to Startup Type and click Apply, then Start. Another Window should appear and automatically run through a process. When that's finished, return to your Taskbar and select Wireless Networks. Refresh the network list and your Wi-Fi network should now appear.



Restore your Wi-Fi by manually restarting Wireless Zero Configuration

Rainmeter offers many functions of Desktop Gadgets – and it's free and safe

Stop Word nagging you to save the template

If you use Word and it keeps showing you a message asking if you want to save changes to the Normal document template, vou're suffering a frustration that spans many generations of Microsoft Office.

The Normal template is what's used when you first open a blank document. It's possible to save changes to it if you want certain elements to appear every time you open a document, such as a border or watermark. What you don't want is the constant nagging.

Several things can trigger this - badly written extensions ('Add-ins') are the most common culprit. To check whether this is the cause, go to Word's Options menu (under Tools in Word 2003 and earlier, or File in later versions) and remove any extensions you don't need.

Often the problem can be solved by simply deleting the Normal template; Word will create a new one next time it opens. Open Explorer, click View (you may need to un-hide the menu bar first: click Organize, Layout and then 'Menu bar' to do this) and then tick Hidden Files. Next, navigate to C:\Users\Your Name\AppData\Roaming\Microsoft\ **Templates**. Delete the file named Normal ('Normal.dotm') and restart Word.

Replace unsafe Gadgets

Were you a fan of the Desktop Gadgets, such as the analogue clock and weather updates, that Microsoft offered in Vista and Windows 7? Well, hard luck. They were hit by a serious security flaw (www. snipca.com/17304) and instead of fixing this flaw, Microsoft just advised everyone to stop using Gadgets.

So likewise, rather than suggest a fix for this, we think you should use better and safer third-party alternatives instead. such as the free tool Rainmeter (http:// rainmeter.net) - which is far more than just a weather widget. It's a tad more complicated than Windows Gadgets but it's very customisable. You can use its wide range of skins and widgets to display the weather, the current state of your PC's vital components, music player controls, web links and much more (see screenshot above). Better still, it works with any version of Windows, from XP right through to Windows 10.

Make Aero Glass work again

Windows Vista and 7 have an effect called Aero Glass, where program windows



Windows 7 can lose its Aero Glass effect after a graphics glitch - but you can fix it

appear to be transparent, letting you see whatever's lurking beneath. It's common for graphics-card glitches to disable Aero Glass, leaving you staring at a much plainer, uglier Desktop.

To restore your program windows to their full see-through glory in Windows 7, type Aero into the Start menu and click 'Find and fix problems with transparency and other visual effects'. A help window will appear. Click Next through all the options that appear, and your transparent windows should return.

If you're running Windows 8/8.1 and fancy an Aero Glass-style Desktop, try the free 'Aero Glass for Windows 8' tool (www.glass8.eu).

Put your PC in hibernation

Windows Vista and 7 PCs have a power state called Hibernate, which is primarily designed for laptops. When in Hibernate mode, the PC automatically saves all your open documents to a special file on the hard drive and switches off the power, then lets you resume from where you left off next time you switch on. It's a much better way to save laptop battery life than simply shutting the lid.

Hibernate should be one of the options you see when you click the arrow next to 'Shut down' in the Start menu, but it can randomly disappear, and Microsoft has never fixed this - and probably never

To re-enable Hibernate on your laptop, click Start then type cmd into the search box. Right-click Command Prompt and choose 'Run as administrator', then click Continue if prompted. When the prompt appears, type powercfg.exe /hibernate on (include the space before the slash) and press Enter. Restart your PC or laptop, and Hibernate should be back.



Restore Hibernate if it disappears from the Start menu in Windows Vista and 7

HAS MICROSOFT ABANDONED IE?

Not quite. Microsoft will withdraw support for all but the most recent version of Internet Explorer (IE 11) in January 2016, but IE 11 may live on for years - and it's even built into Windows 10.

However, it's not Windows 10's default browser (that privilege goes to the faster, safer Edge: www.snipca.com/17307). To use IE in Windows 10 you'll have to search

for it from the Start menu. If you're running Windows 8/8.1 or earlier, we recommend switching to a different browser before IE is abandoned for good. Edge only currently works in Windows 10.

so your best alternative is either Chrome or Firefox. Both are still being patched and updated for Windows XP, which IE certainly isn't.

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Problems Solved

PROBLEM OF THE FORTNIGHT

Why won't Google find our website?

Our model-boat club has had a WordPress website (www. edmbc.net) for over two years now. Despite the length of time our site has been online, we still don't have a hint of a presence on Google, Many other sites refer to and even link to ours, but if you search for our site, even by its full name (Eastleigh and District Model Boat Club), there are no Google hits. Please advise what we have got to do to achieve this, as we are getting many complaints.

Stuart Jowsey

Google isn't indexing your website because your home page contains code that explicitly tells it not to.

Google receives plenty of criticism for privacy-related misdemeanours, both real and perceived, but the mechanics of its search engine respect special electronic instructions that can be inserted into a website that tell Google not to index a particular web page, or even a whole site. This is typically done by including a special file called 'robots.txt' in the website server's root (top) folder, or by including in the main index page a special bit of code known as a meta tag. A quick look at the source code of your website's index page shows that the latter is present - and that's why Google is ignoring your content.

The offending line is: <meta name="robots" content="none">. While the usual instruction for preventing indexing is '<meta name="robots" content="noindex,



Make Google find your website faster by using the company's Add URL page



Delete meta tags from your source code that prevents Google finding your website

nofollow">', Google interprets the "none" parameter to mean the same thing - so Google simply bypasses your website.

As you're using WordPress we'd imagine that this is simply an inherited aspect of your chosen theme, rather than an intentional insertion by you or on your web developer - although it's possible that someone has misunderstood how Google interprets the "none" parameter.

The solution is to delete this instruction from your website's index page. Quite how you do that depends on how you update and upload assets to your website host, so we can't offer precise instructions. You should either request that your website developer remove the offending line or, if you do the job yourself, then open index.html page in a text editor, delete the line (see screenshot above), save the page and then upload it to your server using your FTP software.

Once you've done this Google should index your site within a few weeks. If you're impatient, you can speed up the process by specifically flagging your site for Google's attention via the company's Add URL page, at www. snipca.com/16937. Just type the website's address (URL), fill out the CAPTCHA security form then click Submit Request (see screenshot left).

It might require more work to move your site up the results list. For advice on search-engine optimisation (SEO), read Google's own guide at www. snipca.com/16938.

Why don't I see the Size option in Windows **Explorer?**

Following the advice in Issue 452's Delete All Junk Files cover feature, I tried using Windows

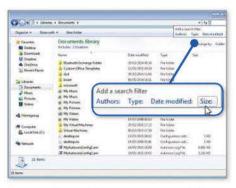
Explorer to search for my biggest files. However, when I click in the search field at the top right, the Size option isn't shown. Instead, I see Date Taken, Tags, Type and Date Modified. Where's the Size option you talked about?

Tim Mills

We must hold our hands up here and admit that we weren't quite clear enough on this point.

While the Size option will always be available when browsing standard Windows folders, these clickable shortcuts vary when using Windows Explorer to view Libraries. So, for example, if you click the Pictures Library, you'll in fact get Date Taken, Tags and Type as clickable shortcuts – but not Size. However, if you navigated to the Pictures folder directly (rather than viewing it via Libraries), then you would indeed see Size as a clickable shortcut.

We intentionally said 'clickable shortcut' because you can use any search parameter in any folder or Library at any time. However, those not available as clickable shortcuts must be typed. In the Pictures Library, for example, you can type size: medium to find files between 100KB and 1MB, or size:gigantic to find all files over 128MB - as we explained later in the article.



If not readily available, type your search filter manually into Explorer's search field

Our experts solve all your tech problems

Margine Email us your problem and we'll try to help: noproblem@computeractive.co.uk

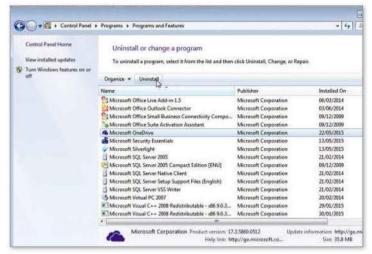
Do I really need three cloud services?

I am awfully confused. I seem to have OneDrive. iCloud and BT Cloud. Do I really need all three of these? I have a Windows 7 laptop and an external USB hard drive that I use for backups. I also have an Apple iPad Mini running iOS 8.2, and a Windows Phone. The Windows Phone seems to send photos to these cloud services. I find it all so hard to understand. Is it sensible to keep them all, or should I just have one? How do I get rid of them?

Marilyn Teal

None of these services is essential, and you probably don't need all three - but it depends on if or how you use them.

OneDrive (www.onedrive.com) is Microsoft's cloud service and comes pre-installed on the latest Windows Phone devices. It's likely that the complementary Windows app was installed on your PC when setting up



Remove unwanted cloud-service programs from your PC via Control Panel

your phone, even if you didn't realise - and it's now syncing stuff with your phone.

Apple's offering is iCloud (www.icloud. com) and, while it's certainly useful for your iPad as a place to save files off the device, having the Windows version installed is useful only if you like to keep your PC's photos and Outlook emails, calendar and contacts synced. We have a feeling you don't do that.

BT Cloud (www.btcloud.bt.com) is

online storage that's included with various broadband packages from BT, and you get 5GB or 50GB depending on your deal. It's the least intrusive of the three and free storage is always useful but again, it sounds to us that you have little need or indeed desire for it.

In all these cases, you should be able to uninstall these tools with little or no impact on how you use your PC, though if you remove

OneDrive you'll obviously lose the photo synchronisation - but it sounds like this is annoying you anyway. So, click Start followed by Control Panel, then the 'Uninstall a program' link under Programs. Now scroll through the list to find the first unwanted service, click to highlight it then click Uninstall at the top and follow the prompts. Do the same for one or both of the remaining two services, then restart your PC.

Are 6TB hard drives fakes?

I keep seeing hard drives advertised for sale with capacities of 4, 5 and 6TB - and even beyond. I have previously assumed that technology must have moved on apace since I bought my 2TB drive, but you reviewed a 3TB hard drive and said it was the highest-capacity drive you had seen. So are companies promising capacity that just isn't possible? Or are the massive drives I'm seeing on Google are out-and-out fakes? Many thanks for your time and congratulations on a truly superb mag.

Mat O'Neill

We don't know which review you're referring to, but maybe you misunderstood something we said. Higher-capacity hard drives are real - 6TB models have been around since 2014, and even larger drives are now appearing.

However, some drives sold as higher capacity are actually made up of multiple smaller drives. The 8TB WD My Book Duo external drive (pictured right), for example, actually contains two 4TB hard drives in a RAID 0 configuration, which 'stripes' data across both drives so that they in effect appear to the user as one 8TB drive. Be warned that RAID 0 configurations effectively double the risk of data loss, because if one drive fails then data might be unrecoverable from both - so back up regularly.



Problems Solved

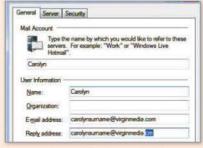
Why is one friend's email address always wrong?

I have a Windows 7 PC and an iPad Mini and use Windows Live Mail (WLM).

I have a friend - let's call her Carolyn Surname. If I compose an email to her the correct address (carolynsurname@virginmedia. com) is entered. However when I reply to her messages, the address is incorrectly inserted as carolyn surname@virginmedia.cm (with the 'o' missing from .com). This happens even whenever I use WLM or my iPad Mini. I've checked all my contact lists and cannot find this rogue address anywhere. Any ideas? Sheelagh Wurr

This is your friend's problem, not yours. When setting up her email program, she inadvertently mistyped her email address in the program's 'Reply' field. This is a useful feature for people who manage multiple email addresses and would like replies sent to an address other than the one from which they're sending, but in this case it's causing a problem for recipients of her messages.

The solution is for her to correct the typing error. We don't know which email program she uses but in WLM she should click the blue menu arrow at the top left then click Options, then 'Email accounts'. She should then select the email address and click Properties, and on the General tab, correct the mistake in the 'Reply address' field.



Correct mistyped Reply email addresses in your email program's settings

What's causing my text to change size?

I have a glitch in my laptop that appears usually after a few minutes of use, whereby the text on the screen suddenly increases or shrinks in size, totally uncontrollably. At this point it seems all I can do is reboot and hope for a longer respite to complete my work. Please help!

Mr P B S Johnson



Tweak your mouse's settings to stop random zooming in and out of your screen

Do you have a mouse with a scroll wheel? These often double as a 'middle' mouse button,

and it's possible that yours has been inadvertently configured to execute zoom functions. To check, click Start followed by Control Panel and then 'Hardware and Sound' followed by Mouse. Now click the Buttons tab. The available options will depend on your mouse drivers, but look for a 'Wheel button' menu - and make sure it's set to something other than

If this doesn't do the trick, we're wondering if you use a Windows accessibility feature called Sticky Keys? If so, you'll know that this effectively allows certain keys, including Shift and Control (Ctrl), to be switched on and off - this helps with some typing actions. When it's enabled, tapping Control causes subsequent turns of the mouse wheel to make you zoom in or out. You need to be aware of this side effect or disable Sticky Keys via Control Panel. To do this, click Ease of Access followed by 'Change how your keyboard works' and then clear the 'Turn on Sticky Keys' box.

Will a drive format remove viruses?

I scanned a USB drive using Kaspersky only to find various

infected files. Unfortunately, Kaspersky was unable to eradicate the virus. I do have another copy of all the files, which are virus-free. So, if I format the infected USB drive will this eradicate the virus and make this drive safe to use again?

Jeff Cope

In theory, yes - but some viruses are able to survive Windows' formatting commands. The safest method is to overwrite every part of your USB drive using a specialist tool, such as KillDisk (www.killdisk.com), which is free but does require registration.

Attach your USB drive then launch KillDisk. Locate the drive in the left-hand pane then tick the relevant 'Select for Wipe/Kill' box. Now click the Wipe



Use a specialist tool like KillDisk to overwrite a drive that has been infected with a virus

button at the top and select 'One Pass Zeros (1 pass') in the Method list (no other method works in the free version). Take a few moments to make sure you've selected the correct drive, then click Start.

How do I set a default email signature?

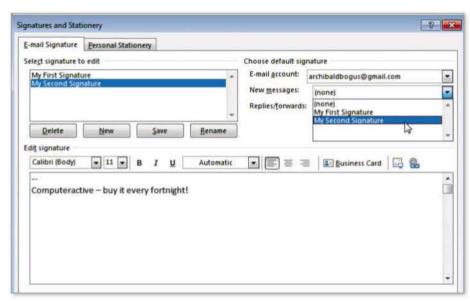
I read your reply to Betty Lewis ('How do I create an email signature in Outlook 2013?',

Problems Solved, Issue 453) and followed your advice to set up various email signatures. It works as you explained but I have one annoyance: how do I set up a default signature?

At the moment, the default signature is the first one I set up, but I'd like to change this from time to time. I did this once by deleting all my signatures and starting again, creating the one I wanted first, but that's a lot of work. Is there an obvious or quick way to do this that I'm missing?

Derek Conley

Yes, you can do this. You already know how to reach the 'Signatures and Stationery' dialogue box, but for the benefit of other readers: click File followed by Options, then select the Mail category and click the Signatures button in the 'Compose messages' section. Now create as many signatures as you want (by clicking the New button) and, when you



Set your default email signature in Outlook 2013 in the 'Signatures and Stationery' dialogue box

want to set a new default, open the dropdown menu next to 'New messages' and choose the relevant signature. To set the same signature as the default for replies and forwarded messages, choose the same signature from the 'Replies/ forwards' dropdown.

Finally, a tip: you can switch signatures on a message-by-message basis right from the Compose window. Just select the ribbon's Message tab, click the Signature button (in the Include group), then choose the desired signature from the dropdown list.

Why can't I print from one of my PCs?

I use an Epson Stylus Photo P50 printer, and an Epson Perfection 4990 Photo scanner. I had a local technician visit to network my computers, and I have a button that lets me switch between them. The scanner has only ever worked with one computer, but the technician did get the printer to work with both computers, until recently, when the problem returned. Can you tell me what to do, so I can sort it out myself, or tell my technician the problem? I'm always getting Windows updates, so I'm wondering if that's the problem. Also, I'm looking at Windows 10: will my printer and scanner work with that?

Ray Phillips

You didn't tell us very much about your setup or what the technician might've done, but it sounds like your two networked PCs have a KVM (keyboard/video/mouse) switch that lets you control two PCs



A KVM lets you control multiple PCs with one set of peripherals

with one keyboard, mouse and display.

Our guess is that your technician has attached the printer to one of the PCs, and the other PC accesses it over your network. So, if the second PC is switched off, then the first won't be able to print - even if the printer is left switched on. The solution is to have both PCs switched on when you need to print.

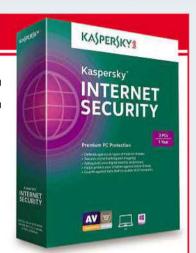
The same goes for the scanner.

As for whether or not your gear will work with Windows 10, the answer is... probably. Epson has issued Windows 7 drivers for both devices and, while there's no guarantee that the company will release updated drivers specifically for Windows 10, the existing drivers should do the job.

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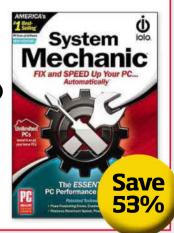
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Can I rotate my YouTube videos?

I uploaded my holiday videos to YouTube, which took a while because I live in the sticks where broadband isn't so broad. As I uploaded the lot as a batch and left my computer running over several nights, I only realised after they were all online that I'd captured them all upsidedown. My smartphone makes sure the orientation's correct, so I don't know why this

happened - but I now have a bunch of YouTube videos that all need rotating 180 degrees. Is there a way to do this without having to upload them all over again? If not, how do I do it on my PC? And why did my phone allow this to happen?

Andrew Wright



Alarm volume

Ring volume

Also vibrate for calls

You're in luck, because YouTube does offer a rotate feature - but it's pretty well hidden.



Use YouTube's Rotate buttons to correct videos uploaded upside down

First, log into YouTube, click your avatar icon (at the top right) and then click the Creator Studio button. Now click VIDEO MANAGER on the left-hand side, followed by Videos. In the list on the right, locate an affected video then click its Edit button. Now click Enhancements at the top, followed by two clicks on either the 'Rotate left' or 'Rotate right' buttons (curly arrows, just to the right of the preview window - see screenshot).

Click the blue Save button (top right) to make the change permanent.

We can't say for sure why your smartphone did this, but it could be a setting in the phone's camera app. You can't fix the camera's orientation in Apple's iOS for iPhones (though you can fix screen orientation, which isn't the same thing). Some Android camera apps have an orientation lock, but the

setting's location varies greatly: look for a menu button (usually three horizontal dots or lines), and explore.

Another possibility is that your smartphone's accelerometer (which is the component in the device that detects physical orientation) has become confused, or developed a fault. Sometimes resetting the device helps hold down the power button on Android, or power and the home key on an iPhone.

Can I choose my own email notification sound?

My Nexus 7 Android tablet has recently started to shout 'You've got mail' every time a new email message arrives. Previously, a new email was announced by a discreet musical tone, but for reasons I don't understand this has changed to an aggressive spoken message that I really don't like. How can I replace this unpleasant spoken message with my choice of tone?

Clive Christy

default sounds. We can't tell you which app did this, or why, but it's easy enough to rectify.

Launch the Settings app then tap 'Sound & notification' followed by 'Default notification ringtone' (see screenshots below). You can now choose a notification sound of your choice, or none at all. The Nexus 7's default is Iapetus, so choose that if you simply want to go back to how it was.

Our guess is that you've installed an app that has taken it upon Default notification ringtone itself to change your Nexus 7's O Europa Facebook Pop Sound & notification Hangouts Message lapetus O 10 O Rhea O Salacia Tethys

Change your Android phone's email notification sound via your settings

However, you suggest that you want to set your own tone. You can do this by choosing any audio file stored on your device, but you'll need to install a file-explorer app to navigate to your tones. ES File Explorer is a very popular free option, so download it from www. snipca.com/17071.

Now repeat the above steps but after tapping 'Default notifcation ringtone', tap ES File Explorer followed by Just Once. Navigate to the relevant folder and then simply tap the desired audio file. You can find suitable audio files by searching on Google, or create your own using an app such as Ringtone Maker - a free download from www.snipca.com/17073.

NEXT ISSUE

- Why is Skype using so much data?
- How do I disable the right mouse button?
- Why won't Resource and Performance Monitor work? ...And many more

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Windows Task Manage

Restore lost tabs, stop crashes and find the Task Manager when it disappears

Task Manager won't launch

If you see an error message when launching Task Manager, it could mean that a system file is corrupted. System File Checker, a tool included with Windows, can fix this. Click Start, type cmd into the search bar (or straight into the Windows 8/8.1 Start screen), then right-click cmd (or Command Prompt in Windows 8/8.1) and choose 'Run as administrator'. Next, in the Command window, type sfc /scannow, then press Enter and wait - it can take many minutes for the process to complete. Restart your PC, then try launching Task Manager.

If it still doesn't work, a malware infection might be the problem. Make sure your security software is up to date, then perform a full scan.



If Task Manager is corrupted, this special command can fix it

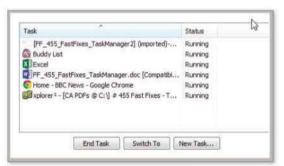
Task Manager disappears from the Taskbar

If this happens when you hit Task Manager's Minimize button (the single horizontal bar at the top right of the program window), it's probably because you have the Hide When Minimized option ticked in the Options menu.

The solution is to remove this tick – but how do yo do that when Task Manager has disappeared? The trick is to doubleclick the small, green meter-style icon in the notification area at the far right-hand side of the Taskbar. Of course, now that vou've discovered this handy trick you can always keep Hide When Minimized ticked for a tidier Taskbar.

All the tabs have vanished

This happens when you double-click the area just to the right of Task Manager's



Missing your Task Manager tabs? Just double-click at the top of the window

tabs bar. To make the tabs reappear, just double-click at the very top of the Task Manager window. Note that you won't have the problem of vanishing Task Manager tabs in Windows 8/8.1, presumably because Microsoft realised the confusion this can cause.

Processes tab is overrun with duplicate entries

It's a bit worrying when you see duplicate entries in the Processes column sometimes up to a dozen or so. But while you may think Task Manager (or your PC) is going haywire, this is actually quite normal. Chrome browser processes (chrome.exe) are a prime example. To help prevent crashes, Chrome launches each tab as a separate process. The idea is that if one tab becomes unstable, only that process needs to be closed, and doesn't take all the others with it. This isn't a fault so there's no fix, as such, other than closing the related programs.

Task Manager keeps crashing

If Task Manager is unstable, the Windows Event Viewer can help track down the

First, launch Task Manager and wait for it to crash (or perform whatever action causes it to crash). Then, immediately click Start, type eventvwr.msc into the search bar (or the Start screen in Windows 8/8.1) and press Enter. Now, in the left-hand pane, double-click to expand Windows Logs then click Application. In the middle pane, check

those entries with a yellow Warning icon to see if you can find one that relates to Task Manager. You do this by selecting an entry, then clicking the Details tab below.

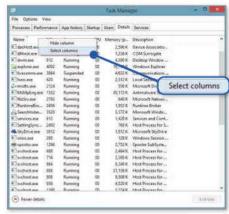
We obviously can't tell you here how to fix every single possible cause of the problem, but the information on the Details tab should help you find the solution quickly. You can use Google to search for the info

provided in the EventData field.

Some columns are missing

With Windows 8/8.1, Microsoft eliminated Task Manager's disappearing tabs (see 'All the tabs have vanished' tip), but it added customisable columns - and it's all too easy to accidentally hide one.

This is a particular problem on the Details column, where an inadvertent right-click on one of the column headings could lead to you choosing the Hide Column option accidentally: the pop-up menu's so small you might not even notice it. So, if you've got missing columns in the Details tab, right-click another heading, choose Select Columns, tick the ones you want, then click OK. It's much the same on other tabs, though the right-click menus are longer (and therefore easier to notice), and you can select or clear directly from the pop-up.



Restore hidden columns to the Details tab by right-clicking and choosing Select Columns





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WebUser

In the next issue of our sister title Web User...

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802.11n A standard for wireless networks that allows for high transfer speeds.

Balanced armature A headphone design that produces a more accurate sound, but at the expense of a powerful bass.

Beta A version of software that's being tested.

Bloatware Unwanted software included on a new computer or mobile device by the manufacturer.

Botnet A group of infected computers used to infect other PCs.

Burn in The theory that headphones sound better after a few weeks of use.

Cache A temporary space for storing information.

DisplayPort A new socket for connecting monitors that's still relatively rare.

DivX A popular type of compressed video file.

Download mirror A website that contains the same downloadable software as others, bundled in a branded installer.

Driver A file that tells Windows how to work with a peripheral device.

DSLR Digital single lens reflex. A digital camera that uses a moving mirror so its viewfinder looks out through the lens.

DVI Digital Visual Interface. A common type of display connector that can carry a digital signal.

Eight-core A standard processor has one core, but most modern processors are dual-, quad- or even eight-core, making them faster.

Emulator A program that makes one computer act like another.

Flash memory A type of memory that can retain information without a power source. Used in memory cards, USB memory keys and other storage devices.

Format Deleting all the data on a drive to recover space and make it work faster

FTP File Transfer Protocol. A system for transferring files between computers. Often used when uploading websites.

GHz Gigahertz. A measure of how many instructions a chip can process per second.

JPEG Joint Photograph Experts Group. A common type of image file created by most digital cameras.

Megapixel A measure of the amount of detail that can be recorded by a digital image.

Meta tag A piece of data that gives information about a file.

MicroSD A type of memory card.

Motherboard The main circuit board inside every PC into which all other parts connect.

NAS Network-attached storage.

Open source Software that can be modified by anyone.

RAID A system for storing data and backing up PC hard drives.

RAM Random-access memory.

Ransomware Malware run by hackers who take over your PC and demand a payment to release it.

Raw A format for digital photos that stores the image exactly as the camera captured it.

Resolution The amount of detail shown in an image.

Roaming fees Charge incurred for using your phone to receive data through overseas networks.

SATA Serial ATA. An interface for connecting modern hard drives and optical discs to a computer.

SD card Secure Digital card.

Server A PC on a network that distributes data to other PCs

SSD Solid-state drive.

System restore point The collection of system files stored by System Restore on a given date and time to which Windows can revert if a problem occurs.

sRGB A standard RGB colour space for use on monitors, printers and the internet.

Trojan A malicious PC program disguised as a harmless software.

Two-factor authentication A system that uses two different means to identify the user.

USB 2.0 Faster successor to USB.

USB 3.0 An even faster version of the USB standard.

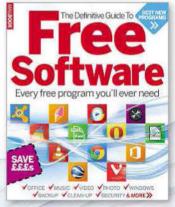
VPN Virtual Private Network.

White balance Adjusts the balance of colours in the image to produce natural-looking images.

Wildcard A character that can be substituted for one or more characters in a web search.

ZIP file A file that can contain a number of compressed documents or files.

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Gigabit Ethernet A very fast networking standard that can transfer data at up to 1,000Mbps.

Graphics card A component in a computer that produces the image shown on the monitor.

HDMI High-definition media interface. A type of connection that transmits high-definition video and audio signals.

HTML5 The latest version of the Hypertext Markup Language used to create most web pages.

INI file An informal standard for configuration files for some platforms or software.

Overclocking Making a processor work faster to improve performance at the cost of it getting hotter.

Partition A large hard drive can be split into two or more partitions.

Plug-in A small program that adds extra features to your browser.

Processor The processor is the brain of a computer.

PUP Potentially Unwanted Program. A program that may not be desired, despite the user consenting to it being downloaded.

Quad core A computer that has four processors on a chip.

The Final Straw



STUART ANDREWS is Computeractive's Mr Angry

This issue Stuart Andrews goes 'cray' over...

Stupid tech slang

Feelin' Hench? Wanna

very year the Oxford English Dictionary (OED) adds another ■ bunch of stupid new words to its online dictionary. Every year, the media reports it like there's nothing else happening anywhere. And every year my blood starts boiling.

Last year's update brought us such delights as 'YOLO', 'binge-watch' and 'adorbs', not to mention 'bro hug', 'cray' and 'SMH'. This year brings us

When text-speak and teen slang collide, bad things happen to the English language



'fo' shizzle', 'Twitterati' and 'twerking'. Don't know what this stuff means? Well, I guess that's what the OED

is there for. Go on. Look it up. Does the adorbs ('cute or adorable') team at the OED add these words because it guarantees cray ('crazy') column inches in the nation's broadsheets? Fo' shizzle ('for sure').

There's something a little pitiful about one of the English language's great institutions trying so hard to get down with the kids. It's not so much 'dad dancing badly at the disco', as dad in skinny jeans, plaid shirt and high-top trainers, blaring rap music out of the windows of his sensible estate car as he cruises down the high street. It's like Gordon Brown mentioning the Arctic Monkeys. Nor should we forget one thing: when text-speak, social media,

marketing gibberish and teen slang collide, bad things happen to the English

How much damage has the internet done to the poor English language over the past decade? Quite a bit, and social media has only accelerated the wretched process. Phrases spread like wildfire and come without age limits, so that grown men in their 40s are enjoying 'bro hugs' and trying to avoid 'mansplaining' and other forms of 'douchebaggery'.

If they're feeling 'hench' they might go on a run then 'humblebrag' about how their 15-mile cross-country run played havoc on their knees. After all, YOLO. If not, they might binge-watch a few 'webisodes' of House of Cards. Really, it makes me want to weep.

Writing 'YOLO' reminds me: can we ban acronyms and abbreviations that sound like stage directions or the text equivalent of audio description for the visually impaired? Are you really laughing out loud when you LOL, and am I to imagine you shaking your head in rage, confusion, disbelief or all three when you SMH? I can already tell that something is IMHO or FYI from the

'WDTM'*

FYI: For your information IMHO: In my humble opinion LOL: Laugh out loud SMH: Shaking my head YOLO: You only live once

*'What do these mean?'

context and the content - you don't need to spell it out (though I have done, just to be polite - see box).

Admittedly, I sometimes like what happens when geek culture and language get together. Trolling, for instance, seems like the perfect word for the behaviour it describes, linking back not just to the vicious Nordic ogres who like to lurk under bridges, but to the practice of trailing bait around a body of water to pull in fish.

And as far as I'm concerned 'bloatware' sums up precisely the sort of useless, space-wasting software you'll find installed on a new laptop.

All the same, who are we kidding? Some of these phrases will win a

YOU CRAY, LRO! IMHO tHat's our vocabulary and culture, but more will prove ephemeral, losing their street cred - if that's not too

permanent place in

dated a concept - almost as soon as they've made it to the dictionary. People who talk about twerking

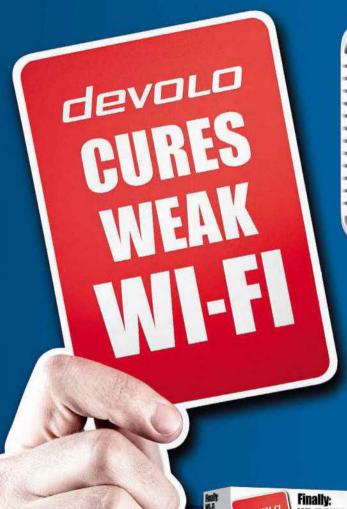
and the Twitterati will one day be looked at with the same sort of disdain that the younger me saved for those who described things as hip or groovy. That's fine, but shouldn't the OED be above this kind of stuff? It should stop pandering to the teen-geek language vandals, and let these phrases

quietly disappear.



Do you think tech slang is cool or codswallop? Do you trink tech stang is cost... Let us know at letters@computeractive.co.uk

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